In this eight-week module, students explore animal defense mechanisms. They build proficiency in writing an informative piece, examining the defense mechanisms of one specific animal about which they build expertise. Students also build proficiency in writing a narrative piece about this animal. In Unit 1, students build background knowledge on general animal defenses through close readings of several informational texts. Students will read closely to practice drawing inferences as they begin their research and use a science journal to make observations and synthesize information. Students will continue to use the science journal, using the millipede as a whole class model. They begin to research an expert animal in preparation to write about this animal in Units 2 and 3, again using the science journal. In Unit 2, students will continue to build expertise about their animal and its defense mechanisms, writing the first part of the final performance task—an informative piece describing their animal, the threats to its survival, and how it is equipped to deal with them. With their new knowledge about animal defenses from Unit 1, students will read informational texts closely, using the same science journal to synthesize information about their animal. Unit 3 allows students to apply their research from Units 1 and 2 to write a narrative piece about their animal that incorporates their research. This narrative will take the format of a choose-your-own-adventure. For their performance task, students will plan, draft, and revise the introduction and one choice ending of the narrative with the support of both peer and teacher feedback. The second choice ending will be planned, written, and revised on-demand for the end of unit assessment. This performance task centers on NYSP12 ELA CCLS RI.4.9, W.4.2, W.4.3, W.4.7, W.4.8, and W.4.9b.

Guiding Questions and Big Ideas

- How do animals’ bodies and behaviors help them survive?
- How can a writer use scientific knowledge to inform and entertain?
- To protect themselves from predators, animals use different defense mechanisms.
- Writers use scientific knowledge and research to inform and entertain.
**Performance Task**

**Choose-Your-Own-Adventure Animal Defense Narrative**

This performance task gives students a chance to blend their research of animal defense mechanisms with narrative writing. In this task, students use their research about a specific animal as the basis for a choose-your-own-adventure story. The narrative opens with a short informational piece describing the student’s animal and its defense mechanism. Then students write a narrative where their animal is featured as the main character that faces a dangerous predator and thus has to use a defense mechanism. The choose-your-own-adventure format lets students envision and write two different variations of the plot, with each variation featuring the use of a different defense mechanism. The first variation will be scaffolded during writing instruction throughout Unit 3, with students using teacher feedback and peer critique to improve and revise their work. The second variation will serve as the End of Unit 3 “on-demand” assessment. After this assessment, students will complete a final revision of their work based on teacher feedback from the end of unit assessment, and then present their final narrative, with both plots, to the class or another audience.

**This task addresses NYSP12 ELA CCLS RI.4.9, W.4.2, W.4.3, W.4.7, W.4.8, and W.4.9b.**

**Content Connections**

This module is designed to address English language arts standards as students read informational texts about animal defense mechanisms. However, the module intentionally incorporates science practices and themes to support potential interdisciplinary connections to this compelling content. These intentional connections are described below.

**Big ideas and guiding questions are informed by the New York State Common Core K–8 Science Framework:**

- Next-Generation Science Standards 4L-S1-1
- From Molecules to Organisms: Structure and Processes

**NYS Science Standard 4:**

Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science. Key Idea 2: Organisms inherit genetic information in a variety of ways that result in continuity of structure and function between parents and offspring. Key Idea 5: Organisms maintain a dynamic equilibrium that sustains life. Key Idea 6: Plants and animals depend on each other and their physical environment.
### CCS Standards: Reading—Informational

<table>
<thead>
<tr>
<th>Long-Term Learning Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can explain what a text says using specific details from the text.</td>
</tr>
<tr>
<td>I can make inferences using specific details from text.</td>
</tr>
<tr>
<td>I can determine the main idea using specific details from the text.</td>
</tr>
<tr>
<td>I can summarize informational or persuasive text.</td>
</tr>
<tr>
<td>I can determine the meaning of academic words or phrases in an informational text.</td>
</tr>
<tr>
<td>I can determine the meaning of content words or phrases in an informational text.</td>
</tr>
<tr>
<td>I can interpret information presented through charts, graphs, timelines, or websites.</td>
</tr>
<tr>
<td>I can explain how visual or graphic information helps me understand the text around it.</td>
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<tr>
<td>I can accurately synthesize information from two texts on the same topic.</td>
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</table>

### CCS Standards: Reading—Foundational

<table>
<thead>
<tr>
<th>Long-Term Learning Targets</th>
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</thead>
<tbody>
<tr>
<td>I can use a variety of strategies to read words.</td>
</tr>
</tbody>
</table>
### CCS Standards: Writing

<table>
<thead>
<tr>
<th>W.4.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.</td>
</tr>
<tr>
<td>b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.</td>
</tr>
<tr>
<td>c. Link ideas within categories of information using words and phrases (e.g., <em>another, for example, also, because</em>).</td>
</tr>
<tr>
<td>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.</td>
</tr>
<tr>
<td>e. Provide a concluding statement or section related to the information or explanation presented.</td>
</tr>
</tbody>
</table>

### Long-Term Learning Targets

<table>
<thead>
<tr>
<th>I can write informative/explanatory texts that convey ideas and information clearly.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I can introduce a topic clearly.</td>
</tr>
<tr>
<td>b. I can develop the topic with facts, definitions, details, and quotations.</td>
</tr>
<tr>
<td>c. I can use linking words and phrases to connect ideas within categories of information (e.g., <em>another, for example, also, because</em>).</td>
</tr>
<tr>
<td>d. I can use precise, content-specific language/vocabulary to inform or explain about a topic.</td>
</tr>
<tr>
<td>e. I can construct a concluding statement or section of an informative/explanatory text.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>W.4.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.</td>
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<tr>
<td>b. Use dialogue and description to develop experiences and events or show the responses of characters to situations.</td>
</tr>
<tr>
<td>c. Use a variety of transitional words and phrases to manage the sequence of events.</td>
</tr>
<tr>
<td>d. Use concrete words and phrases and sensory details to convey experiences and events precisely.</td>
</tr>
<tr>
<td>e. Provide a conclusion that follows from the narrated experiences or events.</td>
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</tbody>
</table>

### NYS Common Core ELA Curriculum

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## CCS Standards: Writing

<table>
<thead>
<tr>
<th>CCS Standards</th>
<th>Long-Term Learning Targets</th>
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</thead>
<tbody>
<tr>
<td>W.4.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)</td>
<td>I can produce writing that is appropriate to task, purpose, and audience.</td>
</tr>
<tr>
<td>W.4.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.</td>
<td>With support from peers and adults, I can use the writing process to produce clear and coherent writing.</td>
</tr>
<tr>
<td>W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.</td>
<td>I can conduct a research project to become knowledgeable about a topic.</td>
</tr>
<tr>
<td>W.4.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.</td>
<td>I can recall information that is important to a topic.</td>
</tr>
<tr>
<td>W.4.9b Draw evidence from literary or informational texts to support analysis, reflection, and research.</td>
<td>I can choose evidence from literary or informational texts to support analysis, reflection and research</td>
</tr>
<tr>
<td>b. Apply grade 4 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text”).</td>
<td>(e.g., “Explain how an author uses reasons and evidence to support particular points in a text”).</td>
</tr>
<tr>
<td>W.4.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes and audiences.</td>
<td>I can write for a variety of reasons.</td>
</tr>
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</table>
## CCS Standards: Speaking and Listening

<table>
<thead>
<tr>
<th>CCS Standards</th>
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</thead>
<tbody>
<tr>
<td><strong>SL.4.1.</strong> Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on <em>grade 4 topics and texts</em>, building on others’ ideas and expressing their own clearly.</td>
<td>• I can effectively engage in discussions with diverse partners about fourth-grade topics and texts.</td>
</tr>
<tr>
<td>a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.</td>
<td>a. I can prepare myself to participate in discussions.</td>
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<tr>
<td>b. Follow agreed-upon rules for discussions and carry out assigned roles.</td>
<td>b. I can follow our class norms when I participate in a conversation.</td>
</tr>
<tr>
<td>c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.</td>
<td>c. I can ask questions that are on the topic being discussed.</td>
</tr>
<tr>
<td>d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.</td>
<td>c. I can answer questions about the topic being discussed.</td>
</tr>
<tr>
<td><strong>SL.4.2</strong> Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.</td>
<td>d. After a discussion, I can explain what I understand about the topic being discussed.</td>
</tr>
<tr>
<td>• I can paraphrase portions of a text that are read aloud to me.</td>
<td>• I can paraphrase information that is presented in pictures and/or numbers.</td>
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</tbody>
</table>
|   • I can paraphrase information that is presented in pictures and/or numbers. | }
<table>
<thead>
<tr>
<th>CCS Standards: Language</th>
<th>Long-Term Learning Targets</th>
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<tbody>
<tr>
<td>• L.4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</td>
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</tr>
<tr>
<td>a. Use relative pronouns (<strong>who, whose, whom, which, that</strong>) and relative adverbs (<strong>where, when, why</strong>).</td>
<td>• I can use grammar conventions to send a clear message to a reader or listener.</td>
</tr>
<tr>
<td>b. Form and use the progressive (e.g., <strong>I was walking; I am walking; I will be walking</strong>) verb tenses.</td>
<td>a. I can use relative pronouns (e.g., <strong>who, whose, whom, which, that</strong>).</td>
</tr>
<tr>
<td>c. Use modal auxiliaries (e.g., <strong>can, may, must</strong>) to convey various conditions.</td>
<td>b. I can use progressive verb tenses (e.g., <strong>I was walking; I am walking; I will be walking</strong>).</td>
</tr>
<tr>
<td>d. Order adjectives within sentences according to conventional patterns (e.g., <strong>a small red bag</strong> rather than <strong>a red small bag</strong>).</td>
<td>c. I can use ‘can,’ ‘may,’ and ‘must’ correctly.</td>
</tr>
<tr>
<td>e. Form and use prepositional phrases.</td>
<td>d. I can use conventional patterns to order adjectives within sentences (e.g., <strong>a small red bag</strong> rather than <strong>a red small bag</strong>).</td>
</tr>
<tr>
<td>f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.</td>
<td>e. I can use prepositional phrases.</td>
</tr>
<tr>
<td>g. Correctly use frequently confused words (e.g., <strong>to, too, two; there, their</strong>).</td>
<td>f. I can write complete sentences.</td>
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<td></td>
<td>f. I can recognize fragmented and run-on sentences.</td>
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<td></td>
<td>g. I can correctly use homophones (e.g., <strong>to, too, two; there, their</strong>).</td>
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</table>
### CCS Standards: Language

<table>
<thead>
<tr>
<th>Language Outcomes</th>
<th>Long-Term Learning Targets</th>
</tr>
</thead>
</table>
| • L.4.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.  
  a. Use correct capitalization.  
  b. Use commas and quotation marks to mark direct speech and quotations from a text.  
  c. Use a comma before a coordinating conjunction in a compound sentence.  
  d. Spell grade-appropriate words correctly, consulting references as needed. | • I can use conventions to send a clear message to my reader.  
  a. I can use correct capitalization in my writing.  
  b. I can use commas and quotation marks to identify speech and quotations from a text.  
  c. I can use a comma before a coordinating conjunction in a compound sentence.  
  d. I can spell grade-appropriate words correctly.  
  d. I can use resources to check and correct my spelling. |
| • L.4.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.  
  a. Choose words and phrases to convey ideas precisely.  
  b. Choose punctuation for effect.  
  c. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion). | • I can express ideas using carefully chosen words.  
  • I can choose punctuation for effect in my writing.  
  • I use formal English when appropriate. |
| • L.4.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies. | • I can use a variety of strategies to determine the meaning of words and phrases. |
## Texts


**Note:** Units 1 and 2 will include additional informational texts; see separate unit overview documents for details.
### Week-at-a-Glance

<table>
<thead>
<tr>
<th>Week</th>
<th>Instructional Focus</th>
<th>Long-Term Targets</th>
<th>Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit 1: Building Background Knowledge: Animal Defenses and the Research Process</strong></td>
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</tbody>
</table>
| **Weeks 1–3** | • Building Background Knowledge: What are defense mechanisms and how do they help animals survive?  
• Building Background Knowledge: What do researchers do?  
• Listening Closely to Paraphrase Information about Animal Defenses  
• Reading Closely about Animals and Their Defenses | • I can explain what a text says using specific details from the text. (RI.4.1)  
• I can make inferences using specific details from the text. (RI.4.1)  
• I can determine the main idea using specific details from the text. (RI.4.2)  
• I can determine the meaning of academic words or phrases in an informational text. (RI.4.4)  
• I can determine the meaning of content words or phrases in an informational text. (RI.4.4)  
• I can interpret information presented through charts or graphs. I can explain how that information helps me understand the text around it. (RL.4.7)  
• I can paraphrase portions of a text that are read aloud to me. (SL.4.2)  
• I can use a variety of strategies to read words. (RF.4.3)  
• I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4) | |
<table>
<thead>
<tr>
<th>Week</th>
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</tr>
</thead>
</table>
| Weeks 1-3, continued | • Science Talk: Synthesizing What We Know about the Animal Defense Mechanisms  
• Listening Closely: Learning about Millipedes and Their Defenses | • I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1)  
• I can explain what a text says using specific details from the text. (RL.4.1)  
• I can make inferences using specific details from the text. (RL.4.1)  
• I can determine the main idea using specific details from the text. (RL.4.2)  
• I can summarize informational or persuasive text. (RL.4.2)  
• I can determine the meaning of academic words or phrases in an informational text. (RL.4.4) | • Mid-Unit 1 Assessment: Reading about Caterpillars, Answering Questions, and Determining the Main Idea (RL.4.2, RI.4.4, and RI.4.7) |
| | • Reading Closely about Millipedes  
• Science Talk: Synthesizing What We Know about the Millipede  
• Setting the Purpose for a Deeper Study of Animal Defense Mechanisms | • I can determine the main idea using specific details from the text. (RL.4.2)  
• I can determine the meaning of academic words or phrases in an informational text. (RL.4.4)  
• I can determine the meaning of content words or phrases in an informational text. (RL.4.4)  
• I can accurately synthesize information from two texts on the same topic. (RI.4.9)  
• I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1) | • End of Unit 1 Assessment: Answering Questions and Summarizing Texts about Animal Defense Mechanisms (RL.4.1, RL.4.2, and SL.4.2) |
<table>
<thead>
<tr>
<th>Week</th>
<th>Instructional Focus</th>
<th>Long-Term Targets (continued)</th>
<th>Assessments</th>
</tr>
</thead>
</table>
| Weeks 1-3, continued |  | • I can use a variety of strategies to read words. (RF.4.3)  
• I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4) |  |
| Unit 2: Using Writing to Inform |  |  |  |
| Weeks 4–5 | • Reading Scientific Text: Reading Closely about an Chosen Animal  
• Science Talk: Synthesizing What We Know about Our Researched Animal  
• Setting a Purpose for Writing: Creating a Rubric for Informative Paragraphs | • I can explain what a text says using specific details from the text. (RI.4.1)  
• I can make inferences using specific details from the text. (RI.4.1)  
• I can determine the main idea using specific details from the text. (RI.4.2)  
• I can summarize informational or persuasive text. (RI.4.2)  
• I can produce writing that is appropriate to task, purpose, and audience. (W.4.4)  
• I can accurately synthesize information from two texts on the same topic. (RI.4.9)  
• I can write informative/explanatory texts that convey ideas and information clearly. (W.4.2)  
• I can use text, formatting, illustrations, and multimedia to support my topic. (W.4.2a)  
• I can produce writing that is appropriate to task, purpose, and audience. (W.4.4) | • Mid-Unit 2 Assessment: Reading and Synthesizing Information from Two Texts on the Pufferfish (RI.4.1, RI.4.2, RI.4.4, RI.4.8, and RI.4.9) |
<table>
<thead>
<tr>
<th>Week</th>
<th>Instructional Focus</th>
<th>Long-Term Targets (continued)</th>
<th>Assessments</th>
</tr>
</thead>
</table>
| Weeks 4-5, continued | • Writing Informative Texts: Sequencing Ideas and Using Research Notes  
• Writing Informative Texts: Revising Paragraphs for Organization, Concrete Details | • I can write informative/explanatory texts that convey ideas and information clearly. (W.4.2)  
• I can introduce a topic clearly. (W.4.2a)  
• I can group supporting facts together about a topic in an informative/explanatory text. (W.4.2a)  
• I can use text, formatting, illustrations, and multimedia to support my topic. (W.4.2a)  
• I can develop the topic with facts, definitions, details, and quotations. (W.4.2b)  
• I can use linking words and phrases to connect ideas within categories of information (e.g., another, for example, also, because). (W.4.2c)  
• I can use precise, content-specific language/vocabulary to inform or explain about a topic. (W.4.2d)  
• I can construct a concluding statement or section of an informative/explanatory text. (W.4.2e) | • End of Unit 2 Assessment: Writing about the Defense Mechanisms of the Pufferfish (RI.4.9, W.4.2, W.4.4, W.4.7, and W.4.8) |
### Week-at-a-Glance

<table>
<thead>
<tr>
<th>Unit 3: Using Writing to Entertain</th>
<th><strong>Instructional Focus</strong></th>
<th><strong>Long-Term Targets</strong></th>
<th><strong>Assessments</strong></th>
</tr>
</thead>
</table>
| **Weeks 6–8**                     | • Writing Informative Texts: Revising Paragraphs Based on Peer Critique  
• Introducing the Format: Choose-Your-Own-Adventure  
• Setting a Purpose for Writing: Understanding the Performance Task  
• Setting a Purpose for Writing: Creating a Rubric for Narrative Writing  
• Writing Narrative Texts: Creating a Character Profile  
| • With support from peers and adults, I can use the writing process to produce clear and coherent writing. (W.4.5)  
• I can write for a variety of reasons. (W.4.10)  
• I can write narrative text about real or imagined experiences or events. (W.4.3)  
• I can introduce the narrator and/or characters of my narrative. (W.4.3a)  
| • I can introduce the narrator and/or characters of my narrative. (W.4.3a)  
• I can establish a situation. (W.4.3a)  
• I can organize events in an order that makes sense in my narrative. (W.4.3a)  
• I can use dialogue and descriptions to show the actions, thoughts, and feelings of my characters. (W.4.3a)  
• I can use transitional words and phrases to show the sequence of events in a narrative text. (W.4.3b)  
<p>| Mid-Unit 3 Assessment: Planning for and Drafting an Introduction for the Choose-Your-Own Adventure Animal Defense Narrative (W.4.3a and d, and W.4.4) |</p>
<table>
<thead>
<tr>
<th>Week</th>
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<tbody>
<tr>
<td><strong>Weeks 6-8, continued</strong></td>
<td>• Writing Narrative Texts: Using Concrete Words and Phrases and Sensory Details</td>
<td>• I can use sensory details to describe experiences and events precisely. (W.4.3c)</td>
<td>• End of Unit 3 Assessment: Writing Choice 2 of the Animal Defense Narrative (W.4.3b, c, d, e, W.4.2a, and W.4.4)</td>
</tr>
<tr>
<td></td>
<td>• Publishing the Performance Task: Citing Sources and Authors’ Celebration</td>
<td>• I can write a conclusion to my narrative. (W.4.3d)</td>
<td>• Choose-Your-Own-Adventure Animal Defense Narrative (RI.4.9, W.4.2, W.4.3, W.4.7, W.4.8, and W.4.9b)</td>
</tr>
<tr>
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<td>• With support from peers and adults, I can use the writing process to produce clear and coherent writing. (W.4.5)</td>
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<td>• I can recall information that is important to a topic. (W.4.8)</td>
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<td>• I can document what I learn about a topic by taking notes. (W.4.8)</td>
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<td>• I can sort my notes into categories. (W.4.8)</td>
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<td>• I can provide a list of sources I used to gather information. (W.4.8)</td>
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<td>• I can use conventions to send a clear message to my reader. (L.4.2)</td>
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<td>• I can express ideas using carefully chosen words. (L.4.3a)</td>
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</table>
Preparation and Materials

Released along with this module is a stand-alone document entitled the Foundational Reading and Language Standards Resources Package for Grades 3-5. This resource package is designed to give teachers resources and guidance for addressing the CCSS foundational reading and language ELA standards. The package includes resources for literacy instruction that occurs alongside the modules. It also cites example lessons within the modules in which these standards are addressed.

The package includes the following resources:

- **Overview**:
  - **Organization and Contents Chart**: A visual representation and written description of the resources in this package.
  - **Research Base**: Research review, implications for instruction, and associated resources for each aspect of foundational reading and language standards instruction.
  - **Sample Schedule**: A sample two-week alternating schedule that outlines one way to organize a foundational reading and language instructional block.
  - **RF and L Standards within the Module Lessons**: A list of examples of foundational reading and language instruction in the 6-minute module lessons, by grade.
  - **References**: Citations for those who would like to do further study.

- **Word Study Criteria**: Specific suggestions and criteria for approaches to word work that teach phonics and word analysis.

- **Additional Work with Complex Text**: Guidance for how to provide additional and more heavily scaffolded support with the complex texts found in the modules.

- **Fluency Resource**: Resources and guidance for fluency instruction.

- **Show the Rule™ Strategy**: Resources and guidance for contextualized grammar and conventions instruction.

- **Independent Reading Grades 3-5**: Resources and guidance for launching independent reading with students.

This resource will be referenced throughout Module 2B, when opportunities exist for connecting and differentiating instruction in the module lessons. Before launching this module, review the Foundational Reading and Language Standards Resources Package for Grades 3-5 and determine how your current literacy schedule aligns with the guidelines in this package.

For grade 4, review the Fluency Resource aligned with RF.3 and RF.4, before Unit 1, as this unit provides opportunities for fluency work with students. The Show the Rule™ sample lesson is included in Unit 3.

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1 Used by permission, Eloise Ginty, Vermont Writing Collaborative. For more information and resources, go to www.vermontwritingcollaborative.org.

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NYS Common Core ELA Curriculum • G4:M2B: Overview • June 2014 • 16
Grade 4: Module 2B: Assessment Overview
Note: As each unit is written, often assessments are revised. Use this document as a general guideline. But be sure to refer to each specific unit overview document for the most correct and complete write-ups of each assessment.

Final Performance Task

Choose-Your-Own-Adventure Animal Defense Narrative
This performance task gives students a chance to blend their research of animal defense mechanisms with narrative writing. In this task, students use their research about a specific animal as the basis for a choose-your-own-adventure story. The narrative opens with a short informational piece describing the student’s animal and its defense mechanism. Then students write a narrative where their animal is featured as the main character that faces a dangerous predator and thus has to use a defense mechanism. The choose-your-own-adventure format lets students envision and write two different variations of the plot, with each variation featuring the use of a different defense mechanism. The first variation will be scaffolded during writing instruction throughout Unit 3, with students using teacher feedback and peer critique to improve and revise their work. The second variation will serve as the End of Unit 3 “on-demand” assessment. After this assessment, students will complete a final revision of their work based on teacher feedback from the end of unit assessment, and then present their final narrative, with both plots, to the class or another audience. This task addresses NYSP12 ELA CCLS RI.4.9, W.4.2, W.4.3, W.4.7, W.4.8, and W.4.9b.

Mid-Unit 1 Assessment

Reading about Caterpillars, Answering Questions, and Determining the Main Idea
This assessment centers on NYSP12 ELA CCLS RI.4.2, RI.4.4, and RI.4.7. Students read an informational text (including diagrams) about an animal’s defense mechanisms. They answer selected-response text-dependent questions that challenge them to interpret information presented in the diagrams and explain how the information in the diagrams contributes to an understanding of the text in which it appears. They then identify the main idea and supporting details of each section of the text.

End of Unit 1 Assessment

Answering Questions and Summarizing Texts about Animal Defense Mechanisms
This two-part assessment centers on standards NYS ELA CCLS RL.4.1, RL.4.2, and SL.4.2. In the first part of the assessment, students read a new text on an animal and its defense mechanisms. They then answer multiple-choice text-dependent questions that include comprehension of key passages and vocabulary. Students then identify the main idea of the text before writing a text summary. In the second part of the assessment, students listen to a transcript read aloud and then write to paraphrase the information presented.
## Mid-Unit 2 Assessment

**Reading and Researching the Defense Mechanisms of the Pufferfish**

This assessment centers on standards NYS ELA CCLS RI.4.1, RI 4.2, W.4.7, W 4.8, and L.4.4 a and b. In this assessment, students will read two texts on the puffer fish. They will answer text-dependent multiple choice and short answer questions demonstrating their ability to infer, summarize, and document what they have learned about a topic by taking notes.

## End of Unit 2 Assessment

**Writing an Informative Text About Pufferfish Defense Mechanisms**

This assessment centers on NYSP12 ELA CCLS RI.4.9, W.4.2, W.4.4, W.4.7, and W.4.8. In this assessment, students will write about the pufferfish and its defense mechanisms. Students will reread two texts from Unit 1 and synthesize information to plan a short, informative piece of writing that answers the question: “How does the pufferfish’s body and behavior help it survive?” In their writing, students must introduce the pufferfish and describe its defense mechanisms and use examples from both texts to support their description.

## Mid-Unit 3 Assessment

**Planning for and Drafting an Introduction for the Choose-Your-Own Adventure Animal Defense Narrative**

This assessment centers on NYSP12 ELA CCLS W.4.3a. In this assessment, students will write a first draft beginning to their choose-your-own-adventure narrative. Students will use their narrative graphic organizers to write a beginning that establishes their narrative by introducing their character, setting, and coming events of their story.

## End of Unit 3 Assessment

**Writing Choice 2 of the Choose-Your-Own-Adventure Animal Defense Narrative**

This assessment centers on NYSP12 ELA CCLS W.4.3b, c, d, e, W.4.4, L.4.1g, L.4.2a, b, and d, and L.4.3b. In this assessment, students will write the Choice 2 narrative of their choose-your-own-adventure narrative. In this piece, students will also feature another defense mechanism of their animal and include a scientific drawing illustrating this feature with a caption explaining the feature.
Grade 4: Module 2B: Performance Task
Summary of Task

This performance task gives students a chance to blend their research of animal defense mechanisms with narrative writing. In this task, students use their research about a specific animal as the basis for a choose-your-own-adventure story. The narrative opens with a short informational piece describing the student’s animal and its defense mechanism. Then students write a narrative where their animal is featured as the main character that faces a dangerous predator and thus has to use a defense mechanism. The choose-your-own-adventure format lets students envision and write two different variations of the plot, with each variation featuring the use of a different defense mechanism. The first variation will be scaffolded during writing instruction throughout Unit 3, with students using teacher feedback and peer critique to improve and revise their work. The second variation will serve as the End of Unit 3 “on-demand” assessment. After this assessment, students will complete a final revision of their work based on teacher feedback from the end of unit assessment, and then present their final narrative, with both plots, to the class or another audience. This task addresses NYSP12 ELA CCLS RI.4.9, W.4-2, W.4-3, W.4-7, W.4-8, and W.4-9b.

Format

Choose-Your-Own-Adventure Narrative

The format of the narrative will be a choose-your-own-adventure genre, based on a study of a mentor text Can You Survive the Wilderness by Matt Doeden. It will include an introduction with a short informational essay about animals the students researched. The narrative will be research-based and have two variations or versions (i.e., two possible outcomes for the plot). One version of the narrative will be scaffolded (during Unit 3 instruction). The other version will function as an on-demand assessment.

Standards Assessed through This Task

- RI.4.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.
- W.4.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
- W.4.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
- W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- W.4.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.
- W.4.9b Draw evidence from literary or informational texts to support analysis, reflection, and research.
Student-Friendly Writing Invitation/Task Description

After researching informational texts on a specific animal and its defense mechanisms, create a choose-your-own-adventure book about your chosen animal. Write an introduction that describes your animal’s physical characteristics, habitat, predators, and defense mechanisms. In your narrative, describe an encounter with a predator and two possible defense mechanisms for survival. Use details and examples from your research to develop your narrative, including concrete words, phrases, and sensory details to convey your animal’s experiences.

Key Criteria for Success (Aligned with NYSP12 ELA CCLS)

Below are key criteria students need to address when completing this task. Specific lessons during the module build in opportunities for students to understand the criteria, offer additional criteria, and work with their teacher to construct a rubric on which their work will be critiqued and formally assessed.

Your choose-your-own-adventure narrative should include:

• An illustrated cover page with title
• An informational page with a physical description of your animal, its habitat, its defense mechanisms, and predators
• An “About Your Adventure” page explaining how to read the book and the possible challenges your animal could encounter (in question form)
• An introduction to your narrative, describing the challenge your animal encounters and two choices (defense mechanisms) it could make in order to survive
• A page for each choice (defense mechanism) describing the experience or events showing how your animal responds to the choice
• List of sources from your research
## Options for Students

- Students will write their narrative individually. They will use their research notes to plan their narratives.
- Students might have a partner to assist as they work on their narrative, but the narrative will be an individual’s product.
- Student narratives could be various lengths, shorter for those for whom language is a barrier.
- Students could present their narratives to their own class as practice for presenting to others in the school community.

## Options for Teachers

- Students may present their narratives to their own class, to other classes in the school, or to parents or other adults.
- Student narratives could be accompanied by additional illustrations.
- Student narratives could be displayed in the room, in the school library, or in the community to enhance student motivation with the potential authentic audiences.

## Resources and Links

**Video:**
- Three-banded armadillo: http://www.youtube.com/watch?v=wSGQrRuyP8U
- Springbok gazelle: http://www.youtube.com/watch?v=qr5Sr8gGSk
- Mimic octopus: http://www.dailymotion.com/video/xf2z1d_mimic-octopus_animals

## Central Text and Informational Texts

- Additional informational texts listed in each separate unit overview document.
Unit 1: Building Background Knowledge: Animal Defenses and the Research Process

In the first unit of this module, students begin by building background knowledge on animal defense mechanisms using an Animal Defenses research journal to record notes and synthesize new information. Listening closely and close reading of informational texts about animal defense mechanisms will prepare students for the mid-unit assessment in which they examine visuals in the text and read about caterpillars’ defense mechanisms. Students then begin a deeper and more focused study of the topic by researching the millipede and its defense mechanisms. They will continue to record notes and to synthesize new information in their Animal Defenses research journals. This whole-class study of the millipede will act as a model for students as they research an animal of their choice in Unit 2. At the end of this unit, students select their “expert animal” to research with a small group during Unit 2.

Guiding Questions and Big Ideas

• How do animals’ bodies and behaviors help them survive?
• How can a writer use knowledge from their research to inform and entertain?
• To protect themselves from predators, animals use different defense mechanisms.
• In order to entertain and inform, writers become researchers.
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<tr>
<th></th>
<th><strong>Mid-Unit 1 Assessment</strong></th>
<th><strong>End of Unit 1 Assessment</strong></th>
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</table>
| **Reading about Caterpillars, Answering Questions, and Determining the Main Idea** | This assessment centers on standards NYS ELA CCLS RL.4.2, RL.4.4, and RL.4.7. Students read an informational text (including diagrams) about an animal’s defense mechanisms. They answer selected-response text-dependent questions that challenge them to interpret information presented in the diagrams and explain how the information in the diagrams contribute to an understanding of the text in which it appears. They then identify the main idea and supporting details of each section of the text. | **Answering Questions and Summarizing Texts about Animal Defense Mechanisms**  
This two-part assessment centers on standards NYS ELA CCLS RL.4.1, RL.4.2, and SL.4.2. In the first part of the assessment, students read a new text on an animal and its defense mechanisms. They then answer multiple-choice text-dependent questions that include comprehension of key passages and vocabulary. Students then identify the main idea of the text before writing a text summary. In the second part of the assessment, students listen to a transcript read aloud and then write to paraphrase the information presented. |
Content Connections

This module is designed to address English Language Arts standards as students read informational texts about animal defense mechanisms. However, the module intentionally incorporates science practices and themes to support potential interdisciplinary connections to this compelling content. These intentional connections are described below.

Big ideas and guiding questions are informed by the New York State Common Core K–8 Science Framework:

- Next-Generation Science Standards 4L-S1-1
- From Molecules to Organisms: Structure and Processes

NYS Science Standard 4:
Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

Key Idea 2:
- Organisms inherit genetic information in a variety of ways that result in continuity of structure and function between parents and offspring.

Key Idea 5:
- Organisms maintain a dynamic equilibrium that sustains life. Key Idea 6: Plants and animals depend on each other and their physical environment.

Texts


**Unit-at-a-Glance**

This unit is approximately 3 weeks or 14 sessions of instruction.

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<thead>
<tr>
<th>Lesson</th>
<th>Lesson Title</th>
<th>Long Term Targets</th>
<th>Supporting Targets</th>
<th>Ongoing Assessment</th>
<th>Anchor Charts &amp; Protocols</th>
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</thead>
</table>
| Lesson 1 | Building Background Knowledge: What Are Animal Defense Mechanisms? | • I can explain what a text says using specific details from the text. (RL.4.1)  
• I can make inferences using specific details from the text. (RL.4.1) | • I can infer about animal defense mechanisms based on information in pictures and text.  
• I can support my inferences with details and examples from pictures and texts.  
• I can document my research using a research journal. | • Observations during carousel brainstorm  
• Participation during unpacking of guiding questions  
• Animal Defense Mechanisms: KWL Chart | • Guiding Questions anchor chart  
• Performance Task anchor chart  
• Carousel Brainstorm protocol |
| Lesson 2 | Building Background Knowledge: Launching Research of Animal Defense Mechanisms | • I can paraphrase portions of a text that are read aloud to me. (SL.4.2)  
• I can explain what a text says using specific details from the text. (RL.4.1)  
• I can infer what a text says using specific details from the text. (RL.4.1)  
• I can interpret information presented through charts or graphs. I can explain how that information helps me understand the text around it. (RL.4.7) | • I can explain what it means to be a researcher.  
• I can paraphrase information presented in a read-aloud on animal defense mechanisms.  
• I can infer about a text by examining its visual. | • Animal Defense research journals-pages 2 and 3: Listening Closely and Examining Visuals note-catchers  
• Observations from participation in Animal Defense Mechanisms: KWL chart construction | • Close Readers Do These Things anchor chart  
• Performance Task anchor chart  
• Back-to-Back, Face-to-Face protocol |
| Lesson 3 | A Closer Read for Vocabulary: Words Related to Animal Defenses | • I can paraphrase portions of a text that is read aloud to me. (SL.4.2)  
• I can determine the meaning of academic words or phrases in an informational text. (RL.4.4)  
• I can determine the meaning of content words or phrases in an informational text. (RL.4.4)  
• I can use a variety of strategies to read words, (RF.4.3)  
• I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4) | • I can paraphrase information presented in a read-aloud on animal defense mechanisms.  
• I can use different strategies to help me read unfamiliar words.  
• I can determine the meanings of unfamiliar words to help me better understand “Award-Winning Survival Skills.” | • Listening Closely note-catcher (page 2 of Animal Defenses research journal)  
• Glossary (pages 24-26 Animal Defenses research journal) | • Vocabulary Strategies anchor chart |
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| Lesson 4 | A Closer Read for Main Ideas: What Is Important about Animal Defenses?      | • I can paraphrase portions of a text that is read aloud to me. (SL.4.2)  
• I can determine the main idea using specific details from the text. (RL.4.2)  
• I can determine the meaning of academic words or phrases in an informational text. (RL.4.4)  
• I can determine the meaning of content words or phrases in an informational text. (RL.4.4) | • I can paraphrase information presented in a read-aloud on animal defense mechanisms.  
• I can determine the main idea of sections of “Award-Winning Survival Skills.”  
• I can identify details that support the main idea of sections of “Award-Winning Survival Skills.” | • Listening Closely note-catcher (page 4 of Animal Defenses research journal)  
• Determining the Main Idea note-catcher (page 5 of Animal Defenses research journal) | • Vocabulary Strategies anchor chart  
• Back-to-Back, Face-to-Face protocol                                                                 |
| Lesson 5 | Reading Scientific Text: Building Expertise on Animal Defense Mechanisms   | • I can paraphrase portions of a text that is read aloud to me. (SL.4.2)  
• I can interpret information presented through charts or graphs. I can explain how that information helps me understand the text around it. (RL.4.7)  
• I can determine the main idea using specific details from the text. (RL.4.2) | • I can paraphrase information presented in a read-aloud on animal defense mechanisms.  
• I can make inferences about animal defense by examining articles that include text and visuals.  
• I can determine the main idea of a section of Animal Behaviors: Animal Defenses. | • Listening Closely note-catcher (Page 6 of Animal Defenses research journal)  
• Examining Visuals note-catcher (page 7 of Animal Defenses research journal)  
• Determining Main Ideas note-catcher (page 8 of Animal Defenses research journal)  
• Observation of participation during Jigsaw | • Jigsaw protocol                                                                 |
| Lesson 6 | Reading Scientific Text: Reading Closely on Animal Defense Mechanisms       | • I can determine the main idea using specific details from the text. (RL.4.2)  
• I can paraphrase portions of a text that are read aloud to me. (SL.4.2)  
• I can document what I learn about a topic by taking notes. (W.4.8) | • I can identify details that support the main idea of a section of Animal Behaviors: Animal Defenses.  
• I can paraphrase and take notes on information presented by my peers in Jigsaw groups. | • Determining the Main Idea note-catcher (page 8 in Animal Defenses research journal)  
• Observation of participation during Jigsaw | • Jigsaw protocol                                                                 |
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<tr>
<td>Lesson 7</td>
<td>Mid-Unit Assessment: Reading about Caterpillars, Answering Questions, and Determining the Main Idea</td>
<td>• I can determine the main idea using specific details from the text. (RL.4.2)</td>
<td>• I can make inferences about caterpillar defense mechanisms by examining articles that include text and diagrams.</td>
<td>• Mid-Unit 1 Assessment</td>
<td>• Close Readers Do These Things anchor chart</td>
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<td>• I can interpret information presented through charts or graphs. I can explain how that information helps me understand the text around it. (RL.4.7)</td>
<td>• I can determine the main idea of a text on caterpillar defense mechanisms.</td>
<td>• Animal Defenses research journal glossary</td>
<td>• Vocabulary Strategies anchor chart</td>
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<td>• I can determine the meaning of academic words or phrases in an informational text. (RI.4.4)</td>
<td>• I can find the meanings of unfamiliar words to help me better understand “Award-Winning Survival Skills: How Animals Elude Prey.”</td>
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<td>• I can determine the meaning of content words or phrases in an informational text. (RI.4.4)</td>
<td>• I can make inferences about caterpillar defense mechanisms by examining articles that include text and diagrams.</td>
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<td>Lesson 8</td>
<td>Preparing for a Text-based Discussion: Science Talk about Animal Defenses</td>
<td>• I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1)</td>
<td>• I can effectively participate in a Science Talk about animal defense mechanisms.</td>
<td>• Animal Defense Mechanisms: Preparing for a Science Talk note-catcher</td>
<td>• Science Talk Norms anchor chart</td>
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<td>• I can prepare myself to participate in discussions.</td>
<td>a. I can prepare for the Science Talk by using evidence from animal defense mechanism texts.</td>
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<td>• Quiz-Quiz-Trade protocol</td>
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<td>a. I can draw on information to explore ideas in the discussion.</td>
<td>b. I can ask questions so I am clear about what is being discussed.</td>
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<td>• Fishbowl protocol</td>
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<td>b. I can follow our class norms when I participate in a conversation.</td>
<td>c. I can ask questions on the topic being discussed.</td>
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<td></td>
<td>c. I can ask questions that are on the topic being discussed.</td>
<td>c. I can follow our class norms when I participate in a conversation.</td>
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<td>c. I can connect my questions and responses to what others say.</td>
<td>• I can observe others participating in a Science Talk.</td>
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<td>Lesson 9</td>
<td>Text-Based Discussion: Science Talk about Animal Defenses</td>
<td>• I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1)</td>
<td>• I can effectively participate in a Science Talk about animal defense mechanisms.</td>
<td>• Preparing for a Science Talk note-catcher</td>
<td>• Science Talk Norms anchor chart</td>
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<td>a. I can draw on information to explore ideas in the discussion.</td>
<td>a. I can ask questions so I am clear about what is being discussed.</td>
<td></td>
<td>• Science Talk protocol</td>
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<td>b. I can follow our class norms when I participate in a conversation.</td>
<td>b. I can ask questions on the topic being discussed.</td>
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<td>c. I can ask questions that are on the topic being discussed.</td>
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<td>c. I can connect my questions and responses to what others say.</td>
<td>• I can observe others participating in a Science Talk.</td>
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<td>Lesson 10</td>
<td>• Determining Main Idea and Summarizing: Reading Closely about Millipedes</td>
<td>• I can paraphrase portions of a text that is read aloud to me. (SL.4.2)</td>
<td>• I can determine the main idea of a section of Venom.</td>
<td>• Listening Closely note-catcher (page 12 of Animal Defenses Research Journal)</td>
<td>• Summarizing Informational Text anchor chart</td>
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<td>• I can determine the main idea using specific details from the text. (RL.4.2)</td>
<td>• I can summarize a section of Venom using the main idea and supporting details found in the text.</td>
<td>• Determining the Main Idea note-catcher (page 13 of Animal Defenses Research Journal)</td>
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<td>• I can summarize informational text. (RL.4.2)</td>
<td>• I can make inferences based on information from pictures and text in a section of Animal Behavior: Animal Defenses, “Poisonous Prey”.</td>
<td>• Listening Closely note-catcher (page 14 of Animal Defenses research journal)</td>
<td>• Close Readers Do These Things anchor chart</td>
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<td>• I can explain what a text says using specific details from the text. (RL.4.1)</td>
<td>• I can support my inferences with details and examples from pictures and texts in a section of Animal Behaviors: Animal Defenses, “Poisonous Prey”.</td>
<td>• “Poisonous Prey” note-catcher (pages 15-20 Animal Defenses research journal)</td>
<td>• Back-to-Back, Face-to-Face protocol</td>
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<td>• I can make inferences using specific details from text. (RL.4.1)</td>
<td>• I can find the meanings of unfamiliar words to help me better understand a section of Animal Behaviors: Animals Defenses, “Poisonous Prey”.</td>
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<td>• I can interpret information presented through charts or graphs. I can explain how the information helps me understand the text around it. (RL.4.7)</td>
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<td>• I can determine the meaning of academic words or phrases in an informational text. (RL.4.4)</td>
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<td>Lesson 11</td>
<td>Close Reading: Learning About Poisonous Animals</td>
<td>• I can determine the meaning of content words or phrases in an informational text. (RL.4.4)</td>
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<td>Lesson</td>
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| Lesson 12 | Close Reading Continued: Learning About Poisonous Animals | • I can explain what a text says using specific details from the text. (RL.4.1)  
• I can make inferences using specific details from text. (RL.4.1)  
• I can determine the meaning of academic words or phrases in an informational text. (RL.4.4)  
• I can determine the meaning of content words or phrases in an informational text. (RL.4.4)  
• I can use a variety of strategies to read words. (RF.4.3)  
• I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4) | • I can make inferences based on information from pictures and text in a section of Animal Behavior: Animal Defenses, “Poisonous Prey”.  
• I can support my inferences with details and examples from pictures and texts in a section of Animal Behaviors: Animal Defenses, “Poisonous Prey”.  
• I can find the meanings of unfamiliar words to help me better understand a section of Animal Behaviors: Animals Defenses, “Poisonous Prey”. | • “Poisonous Prey” note-catcher (continued from Lesson 11; pages 15-20 Animal Defenses research journal) | • Close Readers Do These Things anchor chart  
• Vocabulary Strategies anchor chart  
• Ink-Pair-Share Protocol |
| Lesson 13 | Science Talk: Synthesizing What We Know about Millipedes | • I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1)  
  a. I can prepare myself to participate in discussions.  
  b. I can draw on information to explore ideas in the discussion.  
  c. I can follow our class norms when I participate in a conversation.  
  d. I can ask questions that are on the topic being discussed.  
  e. I can connect my questions and responses to what others say.  
  f. I can accurately synthesize information from two texts on the same topic. (RL.4.9) | • I can effectively participate in a Science Talk about millipede defense mechanisms.  
  a. I can prepare for the Science Talk by using evidence from animal defense mechanism texts.  
  b. I can ask questions so I am clear about what is being discussed.  
  c. I can ask questions on the topic being discussed.  
  d. I can follow our class norms when I participate in a conversation. | • Preparing for a Science Talk note-catcher (page 22 Animal Defenses research journal)  
• Observation of Science Talk | • Science Talk Norms anchor chart  
• Participating in a Science Talk anchor chart  
• Science Talk protocol |
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Lesson Title</th>
<th>Long Term Targets</th>
<th>Supporting Targets</th>
<th>Ongoing Assessment</th>
<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
</table>
| Lesson 14 | End of Unit Assessment: Answering Questions and Summarizing Texts about Animal Defense Mechanisms | • I can explain what a text says using specific details from the text. (RL.4.1)  
• I can make inferences using specific details from text. (RL.4.1)  
• I can determine the main ideas using specific details from the text. (RL.4.2)  
• I can summarize informational or persuasive text. (RL.4.2)  
• I can paraphrase portions of a text that is read aloud to me. (SL.4.2) | • I can paraphrase information read aloud about animal defense mechanisms.  
• I can determine the main idea of “Hearing Sounds through the Ground.”  
• I can summarize “Hearing Sounds through the Ground” using the main idea and supporting details found in the text. | • End of Unit 1 Assessment  
• Tracking My Progress, End of Unit 1 recording form |                                                                 |
Optional: Experts, Fieldwork, and Service

**Experts:**
- Invite a biologist or zoologist to discuss animal defense mechanisms.

**Fieldwork:**
- Arrange for a visit to a local zoo to observe animal defense mechanisms.

**Service:**
- N/A

Optional: Extensions

- Conduct a deeper study of millipedes: Compare and contrast different species and their defenses.
- Create a food web with the millipede to explore the relationships between predators and prey.
- Read about the habitats and ecosystems and the role of individual species in maintaining balance.
- Adopt a millipede as a class pet and observe and record its behaviors.
- Collaborate with the art teacher to teach students how to create scientific drawings and create a scientific drawing of the millipede.
- Conduct hands-on science experiments and demonstrations. Note: The goal of the lessons in this unit is for students to build scientific knowledge while becoming better readers. These lessons do not fully address science content standards, nor do they replace hands-on, inquiry-based science.
Building Background Knowledge:
Animal Defenses and the Research Process

Preparation and Materials

Animal Defenses Research Journal
In Lessons 2–14, students will use an Animal Defenses research journal to record notes and observations about general animal defense mechanisms and the millipede. This journal will be referenced and used in Units 2 and 3 as students write the informational and narrative pieces of the final performance task. Prior to Lesson 2, this journal should be prepared for students and will be used in each subsequent lesson of the unit. Later, in Unit 2, once students have selected an animal to research with a small group, they will use another journal for their research (Expert Animal research journal) with similar graphic organizers and note-catchers. This will help students gather evidence from the texts they read and synthesize their new learning in a similar fashion to Unit 1.

In advance of this unit, consider preparing the Animal Defenses research journal (in Lesson 1) as a copied and stapled packet. In addition, consider providing students with a research folder for use throughout the module. This will help students keep their materials (research journals, texts, writing) organized and in one place.

Note: Each lesson contains a completed page of the Animal Defenses research journal for teacher reference.
Grade 4: Module 2B: Unit 1:
Recommended Texts
The list below includes texts with a range of Lexile® text measures about various animals and their physical attributes, behaviors, and how they survive. This provides appropriate independent reading for each student to help build content knowledge about the topic. Note that districts and schools should consider their own community standards when reviewing this list. Some texts in particular units or modules address emotionally difficult content.

It is imperative that students read a high volume of texts at their reading level in order to continue to build the academic vocabulary and fluency demanded by the CCLS.

Where possible, texts in languages other than English are also provided. Texts are categorized into three Lexile levels that correspond to Common Core Bands: below grade band, within band, and above band. Note, however, that Lexile® measures are just one indicator of text complexity, and teachers must use their professional judgment and consider qualitative factors as well. For more information, see Appendix 1 of the Common Core State Standards.

### Common Core Band Level Text Difficulty Ranges:
(As provided in the NYSED Passage Selection Guidelines for Assessing CCSS ELA)
- Grade 2–3: 420–820L
- Grade 4–5: 740–1010L
- Grade 6–8: 925–1185L

<table>
<thead>
<tr>
<th>Title</th>
<th>Author And Illustrator</th>
<th>Text Type</th>
<th>Lexile Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lexile text measures below band level (under 420L)</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Hungry, Hungry Sharks</td>
<td>Joanna Cole (author)</td>
<td>Informational</td>
<td>410</td>
</tr>
<tr>
<td>High, Higher, Highest: Animals That Go to Great Heights</td>
<td>Michael Dahl (author)</td>
<td>Informational</td>
<td>490</td>
</tr>
<tr>
<td>Sloths</td>
<td>Mari Schuh (author)</td>
<td>Informational</td>
<td>560</td>
</tr>
<tr>
<td>Animal Characteristics</td>
<td>Sue Barraclough (author)</td>
<td>Informational</td>
<td>620*</td>
</tr>
<tr>
<td>Komodo Dragons on the Hunt</td>
<td>Janet Riehecky (author)</td>
<td>Informational</td>
<td>660</td>
</tr>
<tr>
<td>The Best Camouflaged Animals</td>
<td>Megan Cooley Peterson (author)</td>
<td>Informational</td>
<td>670</td>
</tr>
<tr>
<td>Camouflage and Mimicry: Animal Weapons and Defenses</td>
<td>Janet Riehecky (author)</td>
<td>Informational</td>
<td>690</td>
</tr>
</tbody>
</table>

* Lexile based on a conversion from Accelerated Reading level
<table>
<thead>
<tr>
<th>Title</th>
<th>Author And Illustrator</th>
<th>Text Type</th>
<th>Lexile Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The Case of the Missing Arctic Fox</em></td>
<td>Heather Montgomery (author)</td>
<td>Informational</td>
<td>700</td>
</tr>
<tr>
<td>Lexile text measures within band level (420–820L)</td>
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<tr>
<td><em>Freaky Faces</em></td>
<td>David Armentrout (author)</td>
<td>Informational</td>
<td>780</td>
</tr>
<tr>
<td><em>Animal Champions</em></td>
<td>John Bonnett Wexo (author)</td>
<td>Informational</td>
<td>780*</td>
</tr>
<tr>
<td><em>Animal Defenses</em></td>
<td>Etta Kaner (author), Pat Stephens (illustrator)</td>
<td>Informational</td>
<td>790</td>
</tr>
<tr>
<td><em>Biggest, Strongest, Fastest</em></td>
<td>Steve Jenkins (author)</td>
<td>Informational</td>
<td>840</td>
</tr>
<tr>
<td>Lexile text measures above band level (over 820L)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><em>Deadly! The Truth About the Most Dangerous Creatures on Earth</em></td>
<td>Nicola Davies (author)</td>
<td>Informational</td>
<td>1230</td>
</tr>
<tr>
<td><em>Jungle Bugs: Masters of Camouflage and Mimicry</em></td>
<td>Bruce Purser (author)</td>
<td>Informational</td>
<td>No LXL</td>
</tr>
</tbody>
</table>

*Lexile based on a conversion from Accelerated Reading level
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Building Background Knowledge: What Are Animal Defense Mechanisms?
## Building Background Knowledge:
What Are Animal Defense Mechanisms?

### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

<table>
<thead>
<tr>
<th>I can explain what a text says using specific details from the text. (RI.4.1)</th>
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<tbody>
<tr>
<td>I can make inferences using specific details from the text. (RI.4.1)</td>
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### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can infer about animal defense mechanisms based on information in pictures and text.</td>
<td>• Observations during carousel brainstorm</td>
</tr>
<tr>
<td>• I can support my inferences with details and examples from pictures and texts.</td>
<td>• Participation during unpacking of guiding questions</td>
</tr>
<tr>
<td>• I can document my research using a research journal.</td>
<td>• Animal Defense Mechanisms: KWL chart</td>
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</tbody>
</table>
## Agenda

1. **Opening**  
   A. Reviewing Learning Targets (5 minutes)
2. **Work Time**  
   A. Discovering Our Topic: Carousel Brainstorm (20 minutes)  
   B. Engaging the Reader: Read-aloud of *Venom* (10 minutes)  
   C. Preparing to Research (15 minutes)
3. **Closing and Assessment**  
   A. KWL Chart: Animal Defense Mechanisms (5 minutes)  
   B. Launching Independent Reading (5 minutes)
4. **Homework**  
   A. Begin your independent reading book for this unit.

### Teaching Notes

- In this lesson, students use the Carousel Brainstorm protocol to preview *Venom* and *Animal Behaviors: Animal Defenses* as a way to build schema on the topic of animal defenses. Since there are 10 posters to use with this protocol, students likely will not get a chance to visit each poster. Strategically group students and decide which posters they will visit—for example, consider assigning ELLs to the same group and assign them to examine Carousel Brainstorm posters 1–7 since they are not as text-heavy as posters 8–10.

- The read-aloud of *Venom* serves as an engagement strategy by having students examine the diagrams to build background knowledge. Students do not receive their own copy. You may invite students to look through *Venom* during independent reading or other flextime throughout the school day. In subsequent lessons, this text is used as a read-aloud routine for students to listen and then paraphrase to address SL.4.4.

- In this lesson, students consider the module’s performance task prompt to help focus their work. To give yourself more context, preview the full performance task: a stand-alone teacher-facing document.

- In this lesson students learn a cold call strategy called equity sticks. Equity sticks are Popsicle sticks with each student’s name that can be pulled randomly for students to respond to teacher prompts. Research indicates that cold calling improves student engagement and critical thinking. Prepare students for this strategy by discussing the purpose, giving appropriate think time, and indicating that this strategy will be used before students are asked questions. Feel free to use some other total participation technique instead; the goal is to ensure participation and accountability.

- In the closing, students construct a KWL chart. Allow students to generate an initial list in the K, or knowledge column. Students may make statements that you know to be untrue, but these should still be added to the chart. As the class continues to read and learn about animal defense mechanisms, these items can then be confirmed as true or untrue. As this chart is added to in subsequent lessons, the class can mark these items with a Y if they are confirmed to be true or an N if they are confirmed to be untrue.

- Each unit in this module is accompanied by a list of Recommended Texts at a variety of reading levels. Students should use the classroom, school, or local library to obtain book(s) about the topics under study at their independent reading level. These books can be used in a variety of ways—as independent and partner reading in the classroom whenever time allows, as read-alouds by the teacher to entice students into new books, and as an ongoing homework expectation. In this lesson, students browse and select one of these texts for reading throughout the unit.
<table>
<thead>
<tr>
<th>Agenda</th>
<th>Teaching Notes (continued)</th>
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</thead>
<tbody>
<tr>
<td>• In advance: Prepare Carousel Brainstorm posters (see preparation information in supporting materials). Note that this preparation will take time.</td>
<td></td>
</tr>
<tr>
<td>• Prepare the Animal Defenses research journal, where students will record their research notes and thinking throughout Unit 1. Consider stapling these journals into packets for students prior to this lesson. You may have each student create a research folder for storing their journals and other notes, texts, and writing throughout the module.</td>
<td></td>
</tr>
<tr>
<td>• In this lesson, students will browse recommended texts to select books for independent reading. Be sure to have prepared students to select these texts by teaching a mini-lesson on selecting “just right” books at their individual reading level. See separate stand-alone document Launching Independent Reading in Grade 3-5 Sample Plan.</td>
<td></td>
</tr>
<tr>
<td>• Prepare an equity stick for each student by writing the names of students in your class on a Popsicle stick. These can be held in a small jar and will be used as a strategy for cold calling throughout the rest of the modules.</td>
<td></td>
</tr>
<tr>
<td>• Review: Carousel Brainstorm protocol (see Appendix).</td>
<td></td>
</tr>
<tr>
<td>• Post: Learning targets.</td>
<td></td>
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</tbody>
</table>
### Lesson Vocabulary
- infer, inference, defense, mechanism, support, document, inform, entertain; venom/venomous, poison/poisonous, self-defense, survive, toxic, predator, prey

### Materials
- Carousel Brainstorm Poster Preparation (for teacher reference)
- Carousel Brainstorm posters (new; teacher-created; see poster preparation information in supporting materials)
- Carousel Brainstorm: Photos for Posters (one photo per posters 3–10; see supporting materials)
- Document camera
- Directions for Carousel Brainstorm (one to display)
- Markers (different colors for each group)
- Equity sticks (Popsicle sticks with each students’ names written on them)
- *Venom* (book for teacher read-aloud, cover and pages 4–5)
- Guiding Questions anchor chart (new; teacher-created)
- Performance Task anchor chart (new; teacher-created)
- Animal Defense research journals (one per student and one to display; see Teaching Notes)
- KWL chart from page 1 of Animal Defenses research journal (model, for teacher reference)
- Unit 1 Recommended Texts (see Module overview documents)
- Launching Independent Reading in Grade 3-5 Sample Plan (stand-alone document on EngageNY.org, for teacher reference)
### Opening

**A. Reviewing Learning Targets (5 minutes)**

- Read the first learning target aloud to students:
  
  * “I can infer about animal defenses based on information in pictures and text.”

- Circle the word *infer* and ask students to Think-Pair-Share reviewing what it means to infer about something. Listen for responses like: “You use what you know and what the text says to figure out something the author doesn’t specifically say.”

- If clarification is needed, explain what it means to infer or to draw an inference. Say something like: “To make an *inference*, a reader uses what he or she already knows about a topic and combines it with the text he or she read (and notes about the text) to figure out something that the author does not explicitly tell the reader.”

- Provide an example if necessary. You might tell students that if someone is crying, you might infer that someone is sad: you take something you see and combine it with something you already know to infer. They didn’t tell you so you can’t be 100 percent sure, but the detail you saw was the person’s tears and your background knowledge is that people tend to cry tears when they are hurt or sad. You put what you saw (the evidence) together with what you already knew (that tears means hurt or sad) to draw an inference.

- Tell them today they will infer about animal *defense mechanisms*, the topic the class will be studying for the next few weeks. They will use pictures and text to do this.
  - Explain that the first word in the term *defense mechanism*, *defense*, means to protect yourself or keep something or someone from getting hurt.
  - The second word, *mechanism*, means natural reaction in response to something else, so the term *defense mechanism* means how animals react to protect themselves from harm.

- Ask for a student volunteer to read the second learning target:
  
  * “I can support my inferences with details and examples from pictures and texts.”

- Remind students that whenever they make an inference, they must support it with information from the text they are reading and thinking about.

- Ask for a student volunteer to read the last learning target:
  
  * “I can document my research using a research journal.”

- Ask students to Think-Pair-Share about what it means to document research. Listen for responses like: “It means to record information we have learned from things we’ve read.”

### Meeting Students’ Needs

- Discussing and clarifying the language of learning targets helps build academic vocabulary.
GRADE 4: MODULE 2B: UNIT 1: LESSON 1
Building Background Knowledge:
What Are Animal Defense Mechanisms?

Opening (continued)

• Have students give a quick thumbs-up, thumbs-down, or thumbs-sideways to indicate how well they understand today’s learning targets.

Work Time

A. Discovering Our Topic: Carousel Brainstorm (20 minutes)

• Point out the Carousel Brainstorm posters displayed around the classroom.

• Using a document camera, review the posted Directions for Carousel Brainstorm briefly with students and remind them about expectations for group work and discussion.

• Explain that today, they will be in groups of three to four, and rotate through the Carousel Brainstorm posters to discuss the following question:
  * “What can you infer about animal defenses can you make from the pictures and/or text on this poster?”

• Remind students that inferring is when you see or read new information and take what you know from past experience or reading to come to a conclusion about the new information. It is a guess based on evidence.

• If necessary, model briefly by saying something like: “For example, if I were in a group visiting poster 1, I would start by looking at the pages book marked in the text Venom by Marilyn Singer. For example, on page 8 there is a picture of a house with a white fence in front of it. I see a heading that says, ‘Home Is Where the Venom Is.’ I think that venom is like poison because I have heard about poisonous snakes having venom, so I infer that this means there can be poisonous animals in people’s houses! The details that support this inference are the picture of the house and the heading. Next, I would share this inference with my group and we would record it on this Carousel Brainstorm poster.”

• Group students and indicate where each group will start. (You may leave this open-ended and allow groups to visit as many charts as time allows or assign particular charts to each group.)

• Distribute markers (different colors for each group) and ask students to begin. Give them 3 minutes to work on each chart, and then rotate. As students are writing, monitor for text-based inferences. If necessary, gently point participants to interesting comments and inferences, pushing students to cite evidence for their inferences.

• At the end of 15 minutes, invite students to go back to the poster where they began and read through all of the inferences and comments on their assigned poster. Explain that they should be thinking about what they notice and wonder about what has been written on their poster.

Meeting Students’ Needs

• Consider partnering ELL students who speak the same home language, since discussion of complex content is required. This allows students to have more meaningful discussions and clarify points in their native language.

• Provide ELLs with a sentence starter or frame to aid in language production. For example: In the photograph I see ... this makes me think that ...

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**Work Time (continued)**

- **Ask:**
  * “What patterns or themes did you notice in all of the Carousel Brainstorm posters?”
- Invite each group to share out round-robin style what they noticed and wondered until all posters have been shared. Listen for responses like: “I noticed that many of the posters had animals on them,” or “I saw the word defenses repeated again and again.”

**Meeting Students’ Needs**

- **Research indicates that cold calling improves student engagement and critical thinking.** Be sure to prepare students for this strategy by discussing the purpose, giving appropriate think time, and indicating that this strategy will be used before students are asked questions.
- Whole class discussions encourage respectful and active listening, as well as social construction of knowledge.
- Consider taking more time to practice respectful use of the equity sticks if students demonstrate a need for this.

---

**B. Engaging the Reader: Read-aloud of Venom (10 minutes)**

- **Introduce equity sticks** by explaining to students that before you begin today’s lesson you would like to share a new strategy the class will use to help them with their learning. Show students the equity sticks.
- Tell them that each student has a Popsicle stick with his or her name on it. Tell them that the class will use these sticks as a way to call on students to participate during class. This will help you check their understanding during lessons. Tell them the reason they are called equity sticks is because everyone has one and will get a chance to think about questions asked in class and share their thinking.
- Remind students that all learners, including adults, must be willing to take risks to learn something new. They may not always be confident in their thinking, but sharing their thinking is important to learn new things.
- **Discuss the importance of being respectful of everyone’s learning by asking:**
  * “How can the class be respectful when others are sharing their thinking about questions?”
- Listen for responses like: “We’ll actively listen to the speaker by looking at him or her while he or she talks,” or “Only one person will speak at a time.”
- Display the cover of *Venom* so all students can see. Read the title and author aloud to students. Ask:
  * “What do you think venom means?”
- Use equity sticks to call on a few students. Accept all responses, but do not clarify the meaning at this point. Ask:
  * “What do you notice about this book? What do you think you will learn from it?”
- Read the back cover of the book, then ask:
  * “Now what do you think venom means?”
- Display pages 4 and 5 to students. Read the title: “Introduction: Don’t Eat, Don’t Touch, Don’t … Well, Just Don’t!” Ask:
  * “What do you notice about these pages? What do you wonder about these pages?”
**Building Background Knowledge:**

**What Are Animal Defense Mechanisms?**

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<thead>
<tr>
<th>Work Time (continued)</th>
<th>Meeting Students’ Needs</th>
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<tbody>
<tr>
<td>• Listen for students to notice the text features, headings, color, and use of punctuation (all of which are to capture the reader’s attention and cue them to the topic’s dangerous nature).</td>
<td>• Hearing a complex text read slowly, fluently, and without interruption or explanation promotes fluency for students; they are hearing a strong reader read the text aloud with accuracy and expression, and are simultaneously looking at and thinking about the words on the printed page. Set clear expectations that students read along silently in their heads as you read the text aloud.</td>
</tr>
<tr>
<td>• Read aloud the three paragraphs on page 4. Invite students to turn and talk, sharing one interesting thing they learned while listening to page 4. After a minute, use equity sticks to cold call several students and ask:</td>
<td></td>
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<tr>
<td>* “What is one thing your partner learned while listening to page 4?”</td>
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<tr>
<td>• As students share their partner’s learning, ask students to give a thumbs-up to show if they found the same thing interesting.</td>
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<tr>
<td>• Validate responses, then ask the following questions and continue to use equity sticks to cold call students:</td>
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<tr>
<td>* “According to this text, what does poisonous mean?” Listen for responses like: “Something that has poison,” or “something that can make you sick.”</td>
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<tr>
<td>* “What do you think the suffix -ous means?”</td>
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<tr>
<td>• Guide students in noticing that the suffix -ous turns a word into an adjective that describes the quality of the base word. A word ending in -ous means it has an abundance of, or is full of, something. Ask for other examples of words that end in -ous (dangerous, envious). Then ask:</td>
<td></td>
</tr>
<tr>
<td>* “After reading this page, did your definition of ‘venom’ change? Why or why not?” Listen for students to define “venom” as “poison.”</td>
<td></td>
</tr>
<tr>
<td>* “Why do you think the author titled this book Venom?”</td>
<td></td>
</tr>
<tr>
<td>• Validate responses. If it did not come up in the discussion, explain to students this book is all about animals that use venom and poison to survive.</td>
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<tr>
<td>• Invite students to look at the visual on page 4. Read aloud the title and question. Read about each pair of animals. Ask students to hold up one finger if they think the animal on the left is poisonous, or two fingers if they think the animal on the right is poisonous (i.e., hold up one finger for the American toad or two fingers for the bullfrog for the first set of animals).</td>
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<tr>
<td>• Read aloud the title and two paragraphs on page 5. Invite students to turn and talk, sharing one interesting thing they learned while listening to page 5. After a minute, use equity sticks to cold call several students and ask:</td>
<td></td>
</tr>
<tr>
<td>* “What is one thing your partner learned while listening to page 5?”</td>
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<tr>
<td>• As students share their partner’s learning, ask students to give a thumbs-up to show if they also think what the student is sharing is interesting. Validate responses. Ask:</td>
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</table>
## Work Time (continued)

* “Why might an animal use venom?” Listen for responses like: “To catch prey,” “for self-defense,” or “to defend their family or community.”

- Invite students to look at the diagram on page 5. Read aloud the title and directions. Invite students to match the animal with how it injects venom.
- Tell students that they will use this book throughout the module to learn about animal defense mechanisms. They will have many more opportunities to read this book, and can read through it on their own during independent reading or in their free time during the school day if they wish.

## C. Preparing to Research (15 minutes)

- Display **Guiding Questions anchor chart.** Use equity sticks to call on a student to read each question aloud.
- Invite students to focus on the first question: “How do animals’ bodies and behaviors help them survive?” to Think-Pair-Share. Ask:
  * “What does survive mean?” Listen for responses like: “It means to stay alive.”
  * “What do you think is meant by animals’ bodies and behaviors?” Listen for responses like: “Their bodies are how they physically look and are made, and their behaviors are how they act.”
- Explain to students that scientists call what animals do to protect themselves and survive animal defense mechanisms, and in this module, they will learn about defense mechanisms of all kinds of animals.
- Invite students to focus on the second question: “How can a writer use knowledge from their research to inform and entertain?” to Think-Pair-Share. Ask:
  * “What does it mean to inform?” Listen for responses like: “It means to teach someone about something.”
  * “What does it mean to entertain?” Listen for responses like: “It means to do something for someone to enjoy.”
  * “What does the word research mean?” Listen for responses like. “It means you learn about something by reading.”
- If necessary, give an example of something that informs (the nightly news) and something that entertains (a sitcom or movie), and something that does both (a nature show or a show about a period in history).

## Meeting Students’ Needs

- Guiding questions provide motivation for student engagement in the topic, and give a purpose to reading a text closely.
GRADE 4: MODULE 2B: UNIT 1: LESSON 1

Building Background Knowledge:
What Are Animal Defense Mechanisms?

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<tbody>
<tr>
<td>• Explain to students that their written performance task for this module will have to inform and entertain their readers on the topic of animal defense mechanisms and that they will have an opportunity to learn about research during the study of this topic.</td>
<td></td>
</tr>
<tr>
<td>• Display <strong>Performance Task anchor chart.</strong> Use equity sticks to call on a student to read the prompt (the first three sentences only). Invite students to give a thumbs-up if they have read a choose-your-own-adventure-type book before, or a thumbs-down if they have not.</td>
<td></td>
</tr>
<tr>
<td>• Explain that a choose-your-own-adventure is a story that has two possible endings and the reader decides what a character will do at certain points in the story. Tell students that they will learn more about this genre later in the module; for the time being, they just need to know they will research an animal and its defense mechanisms to write a narrative.</td>
<td></td>
</tr>
<tr>
<td>• Distribute <strong>Animal Defense research journals.</strong> Invite students to look through their journals and think about what they notice and wonder about them.</td>
<td></td>
</tr>
<tr>
<td>• Invite students to do a quick go-around in which each person shares in turn. Ask:</td>
<td></td>
</tr>
<tr>
<td>* “What do you notice about the research journal?”</td>
<td></td>
</tr>
<tr>
<td>• Validate student responses and summarize what students noticed. This may sound something like: “Great observations! I heard several of you say that you noticed there were three different sections—one for general animal defense mechanisms, one for the millipede, and one for expert group animals.”</td>
<td></td>
</tr>
<tr>
<td>• Explain to students they will be using the research journal during the entire module, first to collect and document research about animal defense mechanisms in this unit and in Unit 2, and then later to write their choose-your-own-adventure narratives in Units 2 and 3.</td>
<td></td>
</tr>
<tr>
<td>• Invite students to Think-Pair-Share, sharing what they wonder about the research journal. Answer any clarifying questions students may have about it, and say that other things they are wondering about it will be answered as they use the journal.</td>
<td></td>
</tr>
</tbody>
</table>
### Closing and Assessment

<table>
<thead>
<tr>
<th>A. KWL Chart: Animal Defense Mechanisms (5 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Invite students to open to page 1 in their research journals, the Animal Defense Mechanisms: KWL chart. Explain the KWL table to students if a KWL chart has not been used yet with your class (K = what we know or think we know; prior knowledge about the topic, W = what we want to know; our questions, and L = what we learned; answers to our questions or information that confirms/refutes our prior knowledge).</td>
<td>• Graphic organizers engage students more actively and provide the necessary scaffolding especially critical for learners with lower levels of language proficiency and/or learning. For students needing additional support, provide a partially filled-in graphic organizer.</td>
</tr>
<tr>
<td>• Tell students that for the next several days, the class will record their knowledge, questions, and learning using this chart. Invite the students to take several minutes to list all they already know about animal defense mechanisms in the left K column.</td>
<td></td>
</tr>
<tr>
<td>• Use equity sticks to cold call several students to share out with the class. Record students’ comments (both accurate and inaccurate) in the K column. For example, a student may share correct information such as: “Venom is a defense mechanism of some snakes.” Or they might inaccurately say: “Tigers use venom as a defense mechanism.” Tell students that during this unit, they will continue to learn about animal defense mechanisms and will be looking for evidence from different texts to either confirm or revise their current knowledge. This chart will grow throughout this unit as a way to document class growth in their knowledge about animal defense mechanisms.</td>
<td></td>
</tr>
</tbody>
</table>

### B. Launching Independent Reading (5 minutes)

<p>| • Tell students that you have gathered many books related to this topic for them to read independently throughout the module. | • You may wish to provide students with additional time to browse and select a text for reading at their independent reading level. |
| • Remind students that they should use the Goldie Locks Rule for selecting “just right” texts for independent reading. | |
| • Invite students to browse the recommended texts you have displayed for them. | |
| • Tell students they will now think of what they are curious about regarding animal defense mechanisms. What do they want to learn about them? Explain that this is a process that researchers go through to guide their research and discovery. Without curiosity, researchers wouldn’t have any motivation to learn deeply about a topic. Researchers often ask: “Why?” or “How come?” or “What if?” | |
| • Invite students to record at least three questions that they want to know concerning animal defense mechanisms in the middle W column. If students do not have much background knowledge about this topic, they may not have many questions at this time. This is okay; the class will revisit and record more on this chart as they read other texts. Reiterate that they will look for answers to these questions as they continue learning about animal defense mechanisms during this unit. | |</p>
<table>
<thead>
<tr>
<th>Homework</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin your independent reading book for this unit.</td>
<td>Students who cannot yet read independently at any level will benefit from hearing books read to them, either by a caregiver or through audio recordings. Hearing books/texts can be an ongoing assignment for these students.</td>
</tr>
<tr>
<td></td>
<td>In addition, <a href="http://www.novelnewyork.org">www.novelnewyork.org</a> has a free, searchable database of content-related texts that can be played as audio files on a home or library computer. Texts on this site can also be translated into many languages. Use the database to provide at-home reading of related texts to ELLs and their families in their native languages.</td>
</tr>
</tbody>
</table>
**Directions:** On a sheet of chart paper, create the posters according to the directions below. Post around the classroom in advance of the lesson.

| Carousel Brainstorm poster 1 | Write the discussion question on the top of the poster:  
“What can you infer about animal defense mechanisms from these pictures and/or text?” |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Display the book <em>Venom</em> by Marilyn Singer under the poster.</td>
</tr>
</tbody>
</table>
| | Bookmark the following pages of the book with sticky notes:  
page 8 (“Home Is Where the Venom Is” and photograph of the house)  
page 22 (“Pretty Poison” and photos of butterflies)  
page 81 (“Eight Arms to Hold You” and photos of octopuses) |
| Carousel Brainstorm poster 2 | Write the discussion question on the top of the poster:  
“What can you infer about animal defense mechanisms from these pictures and/or text?” |
| | Display several copies of the book *Animal Behaviors* by Christina Wilsdon under the poster. |
| | Bookmark the following pages of the books with sticky notes:  
page 15 (a photo of a walkingstick insect)  
page 36 (a photo of an opossum playing dead)  
page 57 (a photo of a poison dart frog)  
page 59 (a photo of a cinnabar caterpillar)  
page 92 (a photo of a hover fly) |
**Directions**: On a sheet of chart paper, create the posters according to the directions below. Post around the classroom in advance of the lesson.

| Carousel Brainstorm poster 3 | Print and display the photo for poster 3.  
Write the following quote from *Animal Behavior: Animal Defenses*, page 50, below the photo:  
“Their name, which means ‘little armored one’ in Spanish, refers to their bony armor.”  
Write the discussion question below the photo and quote on the poster: “What can you infer about animal defense mechanisms from these pictures and/or text?” |
| --- | --- |
| Carousel Brainstorm poster 4 | Print and display the photo for poster 4.  
Write the following quote from *Animal Behavior: Animal Defenses*, page 8, below the photo: “[It] bounces into the air with arched back and stiff legs. This motion is called stotting or pronking.”  
Write the discussion question below the photo and quote on the poster: “What can you infer about animal defense mechanisms from these pictures and/or text?” |
| Carousel Brainstorm poster 5 | Print and display the photo for poster 5.  
Write the following quote from *Venom*, page 15, below the photo: “They have a tough exoskeleton, and their main defense is to roll into a tight ball.”  
Write the discussion question below the photo and quote on the poster: “What can you infer about animal defense mechanisms from these pictures and/or text?” |
**Directions:** On a sheet of chart paper, create the posters according to the directions below. Post around the classroom in advance of the lesson.

<table>
<thead>
<tr>
<th>Carousel Brainstorm poster 6</th>
<th>Print and display the photo for poster 6.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Write the following quote from <em>Animal Behavior: Animal Defenses</em>, page 97, below the photo: “[It] is named for its stunning ability to mimic not one, but at least three dangerous animals that share its tropical ocean home.”</td>
</tr>
<tr>
<td></td>
<td>Write the discussion question below the photo and quote on the poster: “What can you infer about animal defense mechanisms from these pictures and/or text?”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Carousel Brainstorm poster 7</th>
<th>Print and display the photo for poster 7.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Write the following quote from <em>Animal Behavior: Animal Defenses</em>, page 105: “It feeds on poisonous milkweed plants as a caterpillar. It is unharmed by the poison and stores it up in its body to make itself poisonous to predators.”</td>
</tr>
<tr>
<td></td>
<td>Write the discussion question below the photo and quote on the poster: “What can you infer about animal defense mechanisms from these pictures and/or text?”</td>
</tr>
</tbody>
</table>
**Carousel Brainstorm: Preparation Directions for Teacher Reference Cont’d.**

**Directions:** On a sheet of chart paper, create the posters according to the directions below. Post around the classroom in advance of the lesson.

| Carousel Brainstorm poster 8 | Write the following quote from Animal Behavior: Animal Defenses, page 9: “Much of an animal’s self-defense behavior comes from within it. Most animals are born ‘knowing’ how to defend themselves. Scientists call this inborn knowledge instinct.”
| Write the discussion question below the photo and quote on the poster: “What can you infer about animal defense mechanisms from these pictures and/or text?” |

| Carousel Brainstorm poster 9 | Write the following quote from Animal Behavior: Animal Defenses, page 14: “Camouflage, also known as cryptic coloration, is the one-size-fits-all defense in the world of animals. Animals ... depend on their cryptic colorations to help them blend in.”
| Write the discussion question below the photo and quote on the poster: “What can you infer about animal defense mechanisms from these pictures and/or text?” |
**Teacher Directions:** On a sheet of chart paper, post each of these photos according to the preparation directions for the Carousel Brainstorm.

**Poster #3**

![Photo of an armadillo](http://creativecommons.org/licenses/by-sa/3.0/deed.en)

Photo by WolfmanSF

http://creativecommons.org/licenses/by-sa/3.0/deed.en
Teacher Directions: On a sheet of chart paper, post each of these photos according to the preparation directions for the Carousel Brainstorm.

Poster #4

Photo by Yathin Krishnappa, Creative Commons.
Carousel Brainstorm: Photos for Posters

Poster #5

Photo by Noelle (pause.reflect), Creative Commons
Teacher Directions: On a sheet of chart paper, post each of these photos according to the preparation directions for the Carousel Brainstorm.

Poster #6

Mimic Octopus http://creativecommons.org/licenses/by/2.0/deed.en
Carousel Brainstorm: Photos for Posters

Poster #7

![Monarch Butterfly](image)

Photo by Sid Mosdell, Creative Commons.
Carousel Brainstorm Protocol
In this protocol, you will work with your group to answer the following question as you visit a series of posters and examine their photographs or text. After discussing the question and the poster, your group will record their thinking on the poster below the picture or text.

Discussion question: What can you infer about animal defense mechanisms from these pictures and/or text?

Directions:
1. Examine the poster’s picture or text and discuss the question above.
2. Record your group’s response using details from the picture or text to support your answer.
3. Move to the next poster when your teacher gives a signal.
4. If another group has visited the poster before your group, respond to both the question and their answer.
Directions: Write the following on a piece of chart paper in advance of this lesson.

Performance Task
After researching informational texts on animal defenses, create a choose-your-own adventure book about your chosen animal. Write an introduction that describes your animal’s physical characteristics, habitat, predators, and defense mechanisms. In your narrative, describe an encounter with a predator and two possible defense mechanisms for survival. Use details and examples from your research to develop your narrative, including concrete words, phrases, and sensory details to convey your animal’s experiences.
Guiding question: How do animals' bodies and behaviors help them survive?

<table>
<thead>
<tr>
<th>I THINK I KNOW</th>
<th>I WANT to know</th>
<th>I LEARNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>Y/N</td>
<td>Information</td>
</tr>
<tr>
<td>• venom is poison</td>
<td></td>
<td>• How does a tiger protect itself?</td>
</tr>
<tr>
<td>• animals have lots of different ways they defend themselves</td>
<td></td>
<td>• What if a human approaches an animal? Does the animal use the same defenses it would use if a predator came near it?</td>
</tr>
<tr>
<td>• mimicry is when animals look or act like other animals as a way to protect themselves</td>
<td></td>
<td>• How does a jellyfish sting an enemy?</td>
</tr>
</tbody>
</table>
## KWL Chart: Animal Defense Mechanisms

**Guiding question:** How do animals’ bodies and behaviors help them survive?

<table>
<thead>
<tr>
<th>I THINK I KNOW</th>
<th>I WANT to know</th>
<th>I LEARNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>Y/N</td>
<td>Information</td>
</tr>
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</tbody>
</table>
Source: *Venom* pages 16–17 and 19–20

**Directions:** Listen as *Venom* is read aloud. Use the table below to record your notes.

<table>
<thead>
<tr>
<th>Examples of How Bees and Wasps Protect Themselves</th>
<th>How This Helps Bees and Wasps Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Venom</em> pages 16–17</td>
<td></td>
</tr>
<tr>
<td><em>Venom</em> pages 19–20</td>
<td></td>
</tr>
</tbody>
</table>

**Other Facts about Bees and Wasps**

Explain what this section of *Venom* was about?

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________
Source: “Award-Winning Survival Skills: How Animals Elude Predators”

**Directions:**
Look at the visual on page 2 of “Award-Winning Survival Skills: How Animals Elude Prey.”
In the first column of the graphic organizer below, record three details you see in the visual.
In the second column of the graphic organizer, record the inferences you make based on these details.

**NOTE: Do NOT complete the right-hand column of the graphic organizer yet!**
Read the article.

In the right-hand column of the graphic organizer, record details from the text that support your inferences in the middle column.

<table>
<thead>
<tr>
<th>Details from the Visual (explicit information)</th>
<th>My Inferences (what I infer about this animal)</th>
<th>Details in the Text That Support My Inferences (confirmed with explicit information)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Source: *Venom* pages 26–27

**Directions:** Listen as *Venom* is read aloud. Use the table below to record your notes.

<table>
<thead>
<tr>
<th>Examples of How Ants Protect Themselves</th>
<th>How This Helps Ants Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Venom</em> pages 26–27</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Facts about Ants

Explain in your own words what this section of *Venom* was about:

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________
### Animal Defenses Research Journal:
#### Determining Main Ideas

Source: “Award-Winning Survival Skills”

**Best Action Hero—The spiny pufferfish**

<table>
<thead>
<tr>
<th>Main Idea:</th>
<th>Supporting Details:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Best Special Effect—The three-banded armadillo**

<table>
<thead>
<tr>
<th>Main Idea:</th>
<th>Supporting Details:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Animal Defenses Research Journal:
Determining Main Ideas

**Best Impersonator—The mimic octopus**

<table>
<thead>
<tr>
<th>Main Idea:</th>
<th>Supporting Details:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Source: *Venom* pages 74–75

**Directions:** Listen as *Venom* is read aloud. Use the table below to record your notes.

<table>
<thead>
<tr>
<th>Examples of How Pufferfish Protect Themselves</th>
<th>How This Helps Pufferfish Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Venom</em> pages 74–75</td>
<td></td>
</tr>
</tbody>
</table>

Other Facts about Pufferfish

Explain in your own words what this section of *Venom* was about:

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________
Animal Defenses Research Journal:
Examining Visuals

Source: Animal Behaviors: Animal Defenses

1. Look at the visual in your group’s section of Animal Behaviors: Animal Defenses.
   • Group 1—page 59
   • Group 2—page 78
   • Group 3—page 92

2. In the first column of the graphic organizer below, record three details you see in the visual.

3. In the second column of the graphic organizer, record the inferences you make based on these details.

**NOTE: Do NOT complete the right-hand column of the graphic organizer yet!

1. Read your group’s assigned pages.
   • Group 1—“Bad Smells, Bad Tastes, and Powerful Poisons” (page 55–top of 56, stopping at “Poisonous Prey”; pages 58–60)
   • Group 2—“Venomous Stings and Bites” (page 73; “How Venom Works” box on page 76; “Stinging Tentacles” pages 77–78)
   • Group 3—“Mimicry” (pages 91–94)

2. In the right-hand column of the graphic organizer, record details from your section of the text that support your inferences in the middle column.

<table>
<thead>
<tr>
<th>Details from the Visual (explicit information)</th>
<th>My Inferences (what I infer about this animal)</th>
<th>Details in the Text That Support My Inferences (confirmed with explicit information)</th>
</tr>
</thead>
</table>
Reread the text and identify the main idea for each section of the text.

<table>
<thead>
<tr>
<th>“Avoiding Danger” pages 7–9, stopping at “Self-Defense”; last two paragraphs on page 21; and “Escape Artists” first two paragraphs on page 22</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Idea:</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Idea:</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Animal Defenses Research Journal:
Determining Main Ideas

<table>
<thead>
<tr>
<th>“Venomous Stings and Bites” page 73; “How Venom Works” box on page 76; “Stinging Tentacles” pages 77–78</th>
<th>Main Idea:</th>
<th>Supporting Details:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Mimicry” pages 91–94</td>
<td>Supporting Details:</td>
<td>---</td>
</tr>
</tbody>
</table>
**Question:** How do animals’ bodies help them survive?

**Preparation:** Look back in your Animal Defenses research journal and texts about animal defense mechanisms to find evidence to help you answer the Science Talk question.

<table>
<thead>
<tr>
<th>When I read or see that (evidence) ...</th>
<th>It makes me think that animals’ bodies help them survive by ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Example) most spiders are venomous (<em>Venom</em> page 8)</td>
<td>(Example) I think that the venom paralyzes or kills the spider’s prey and enemies.</td>
</tr>
</tbody>
</table>
Animal Defenses Research Journal:
Science Talk Notes and Goals

My Science Talk Notes: Ideas and Questions

My teacher’s feedback:

My goals for the next Science Talk:
**Guiding question:** How do millipedes’ bodies and behaviors help them survive?

<table>
<thead>
<tr>
<th>I THINK I KNOW</th>
<th>I WANT to know</th>
<th>I LEARNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>Y/N Information</td>
<td>Source</td>
</tr>
</tbody>
</table>

Copyright © 2013 by Expeditionary Learning, New York, NY. All Rights Reserved.
**Source:** *Venom* page 15

**Directions:** Listen as *Venom* is read aloud. Use the table below to record your notes.

<table>
<thead>
<tr>
<th>Examples of How Millipedes Protect Themselves</th>
<th>How This Helps Millipedes Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Venom</em> page 15</td>
<td></td>
</tr>
</tbody>
</table>

Other Facts about Centipedes and Millipedes

Explain in your own words what this section of *Venom* was about:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Animal Defenses Research Journal:
Millipede Defense Mechanisms
Determining the Main Idea

Reread the text and identify the main idea for each section of the text.

<table>
<thead>
<tr>
<th>Main Idea:</th>
<th>Supporting Details:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Explicit information from text</td>
</tr>
</tbody>
</table>

Reading and Writing Like a Researcher:
Summarize page 15 of *Venom*. Use details from the text to support your explanation.
Animal Defenses Research Journal:  
Millipede Defense Mechanisms  
Listening Closely Note-catcher

Source: ___________________________________________

**Directions:** Listen as the text is read aloud. Use the table below to record your notes.

<table>
<thead>
<tr>
<th>Examples of How Millipedes Protect Themselves</th>
<th>How This Helps Millipedes Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other Interesting Things:**
**Focus question:** How do animals use poison to survive?

<table>
<thead>
<tr>
<th>1. What is the gist of this section of the text?</th>
<th></th>
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<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Read Paragraph 1 aloud to a partner. Then use the glossary in the back of <em>Animal Behavior: Animal Defenses</em> to answer the questions on the right.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does the word “<strong>predator</strong>” mean?</td>
</tr>
<tr>
<td>What does the word “<strong>prey</strong>” mean?</td>
</tr>
<tr>
<td>Who is usually poisonous, the predator or the prey?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Now, reread the first paragraph on page 56 silently. Then use details from the text to answer the questions on the right.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is a poisonous animal? How is a poisonous animal different from a venomous animal?</td>
</tr>
<tr>
<td>What is the purpose of this paragraph? What sentence in the text makes you think so?</td>
</tr>
</tbody>
</table>
Animal Defenses Research Journal:
“Poisonous Prey” Note-catcher

4. Take turns reading the second and third paragraphs on page 56 to your partner. Then, working together, use details from the text to answer the questions on the right.

| The text says, “If the bird swallows the monarch, it regrets it.” What do you think “regret” means? |
| Why would the bird regret it? |

5. Look carefully at the following quote: “Scientists have found that the mere sight of a monarch can cause these ‘educated’ birds to gag and retch, as if they were about to be sick.” (page 56) Together, use this quote to answer the questions on the right.

| What do you think “retch” means? What words in the text make you think so? |
| Why is the word _educated_ in quotation marks? |
| What does an “educated bird” know? |
| How does poison help the monarch to survive? |
### 6. Reread the focus question. Using evidence from the text, write one way animals use poison to survive in the box on the right. Write the answer to this question with your red pencil.

<table>
<thead>
<tr>
<th>One way animals use poison to survive is</th>
<th>I think this because</th>
</tr>
</thead>
<tbody>
<tr>
<td>________________________________</td>
<td>____________________</td>
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<td>________________________________</td>
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<td>________________________________</td>
<td>____________________</td>
</tr>
</tbody>
</table>

### 7. Listen as your teacher reads the fourth paragraph on page 56 aloud. Your teacher will help you to choose the right strategy to use in answering the questions on the right.

- **What familiar word do you recognize in “entrap”**?

- **What do you think “entrap” means**?

- **What do you think “oozes” means**? What words in the text make you think so?

- **What do you think “affect” means**? What words in the text make you think so? How is this different from the meaning of the word “effect”? Use a dictionary to help you figure out the difference.

- **What is the purpose of this paragraph**? What sentence in the text makes you think so?
### Animal Defenses Research Journal: “Poisonous Prey” Note-catcher

**8.** Using evidence from the text, sketch what the pill millipede does when attacked by a predator.

<table>
<thead>
<tr>
<th>Using evidence from the text, sketch what the pill millipede does when attacked by a predator.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**9.** Reread the focusing question. Using evidence from the text, write another way animals use poison to survive in the box on the right. Write the answer to this question with your red pencil.

<table>
<thead>
<tr>
<th>Another way animals use poison to survive is</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>I think this because</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**STOP HERE: Continue with the questions below in Lesson 12.**

**10.** Reread the fifth paragraph on page 56 (continued on page 57) silently. Then use details from the text to answer the question on the right.

<table>
<thead>
<tr>
<th>What is the purpose of this paragraph?</th>
</tr>
</thead>
<tbody>
<tr>
<td>What sentence in the text makes you think so?</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>11. Read the second paragraph on page 57 to a partner. Look carefully at the following quote and use it to answer the questions on the right:</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>“Poison dart frogs (also called poison arrow frogs), which live in Central and South America, excrete a poisonous, foul-tasting fluid from their skin when threatened.” (page 57)</td>
</tr>
<tr>
<td>What is another name for “poison dart frogs”? How do you know?</td>
</tr>
<tr>
<td>What do you think “toxic” means? What words in the text make you think so?</td>
</tr>
<tr>
<td>The dash “-” in this quote is called a hyphen. Authors sometimes use a hyphen to join two or more words together to make a new word, called a “compound word.” What two words are joined together with a hyphen in this quote?</td>
</tr>
<tr>
<td>CHALLENGE QUESTION: What part of speech is the compound word “foul-tasting” in this sentence?:</td>
</tr>
<tr>
<td>The foul-tasting fluid helps the frog survive in two ways. What are they?</td>
</tr>
<tr>
<td>12. Think back to the focus question. Using evidence from the text, write one way animals use poison to survive in the box on the right. Write the answer to this question with your red pencil.</td>
</tr>
<tr>
<td>Another way animals use poison to survive is ________________________________</td>
</tr>
<tr>
<td>________________________________</td>
</tr>
<tr>
<td>I think this because ________________________________</td>
</tr>
<tr>
<td>________________________________</td>
</tr>
<tr>
<td>________________________________</td>
</tr>
</tbody>
</table>
13. Examine the photo and caption on page 57. Use details from the text to answer the questions on the right.

Read the caption and look carefully at the photo. What single word in the caption best describes what the photo is meant to show us?

What defense mechanism does the poison dart frog use to help it survive?

What do you think “excrete” means? What words in the text make you think so?

What do poison dart frogs excrete? Use exact words from the text.

14. Reread the first paragraph on page 58 silently. Then use details from the text to answer the questions on the right.

“Of course, if a poisonous animal had a choice, it would rather not be attacked in the first place. It is better for it to stop an attack before it starts.” (page 58)

In the boxes below, draw a picture of each of the ways the text tells us that poisonous animals “stop an attack before it starts.” Be sure to label each picture with words from the text.
Animal Defenses Research Journal:  
“Poisonous Prey” Note-catcher

### Pulling it all together ...

<table>
<thead>
<tr>
<th>WORD MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Reread this note-catcher, noticing the words in bold print. Turn and talk with a partner about three ways you might figure out the meaning of an unknown word. Then, follow the directions on the right.</td>
</tr>
<tr>
<td>Add the definitions for “predator” and “prey” to the glossary of your Animal Defenses research journal.</td>
</tr>
<tr>
<td>Choose three words in bold print on this note-catcher in addition to “predator” and “prey.” Add the definitions of these words to the glossary of your Animal Defenses research journal.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SENTENCE MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Look back at the answers you wrote in red. What do you notice about sentences that tell the purpose of a paragraph? Hint: You may need to look for these sentences in the text to see a pattern.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THE BIG IDEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. Use the evidence you recorded on this sheet, as well as additional evidence from the text, to answer the question below in a well-written paragraph.</td>
</tr>
<tr>
<td>THINK: Based on your observations about the paragraphs in this text, what will be important to consider when writing the first sentence of your own paragraph?</td>
</tr>
</tbody>
</table>

**Synthesize!** Explain how animals use poison to survive (remember to use key words from the focus question in your response):
**Question:** Which millipede defense mechanism is most important? Why?

**Preparation:** Look back in your Animal Defenses research journal and texts about animal defense mechanisms to find evidence to help you answer the Science Talk question.

<table>
<thead>
<tr>
<th>When I read or see that (evidence) ...</th>
<th>It makes me think that the most important millipede defense mechanism is ... because ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Example) most spiders are venomous (<em>Venom</em> page 8)</td>
<td>(Example) I think that the venom paralyzes or kills the spider’s prey and enemies.</td>
</tr>
</tbody>
</table>
My Science Talk Notes: Ideas and Questions

Now that I have heard everyone’s reasons and their evidence, the millipede defense mechanism I think is most important is

because

My teacher’s feedback:

My goals for the next Science Talk:
<table>
<thead>
<tr>
<th>Word/Phrase</th>
<th>Definition</th>
<th>Vocabulary strategy I used to learn this word:</th>
<th>Sketch/Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>defenses/defense mechanisms</td>
<td>how animals protect themselves or their kind</td>
<td>inferred from the text</td>
<td></td>
</tr>
<tr>
<td>entrap</td>
<td></td>
<td></td>
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<tr>
<td>extract</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>frantically</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>habitat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>injecting</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
# Animal Defenses Research Journal: Glossary

<table>
<thead>
<tr>
<th>Word/Phrase</th>
<th>Definition</th>
<th>Vocabulary strategy I used to learn this word:</th>
<th>Sketch/Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>mimicry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>predator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prey</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>poisonous</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>quickly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seizes</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>survive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word/Phrase</td>
<td>Definition</td>
<td>Vocabulary strategy I used to learn this word:</td>
<td>Sketch/Diagram</td>
</tr>
<tr>
<td>-------------</td>
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<td>-----------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>threaten</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unpleasant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>venom</td>
<td>poison that is injected with fangs, stingers, or spines</td>
<td>defined in the text</td>
<td></td>
</tr>
<tr>
<td>warning</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Grade 4: Module 2B: Unit 1: Lesson 2
Building Background Knowledge: Launching Research of Animal Defense Mechanisms
Building Background Knowledge:
Launching Research of Animal Defense Mechanisms

<table>
<thead>
<tr>
<th>Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can paraphrase portions of a text that are read aloud to me. (SL.4.2)</td>
</tr>
<tr>
<td>I can explain what a text says using specific details from the text. (RL.4.1)</td>
</tr>
<tr>
<td>I can infer what a text says using specific details from the text. (RL.4.1)</td>
</tr>
<tr>
<td>I can interpret information presented through charts or graphs. I can explain how that information helps me understand the text around it. (RI.4.7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can explain what it means to be a researcher.</td>
<td>• Animal Defense research journals pages 2 and 3: Listening Closely and Examining Visuals note-catchers</td>
</tr>
<tr>
<td>• I can paraphrase information presented in a read-aloud on animal defense mechanisms.</td>
<td>• Observations from participation in Animal Defense Mechanisms: KWL chart construction</td>
</tr>
<tr>
<td>• I can infer about a text by examining its visuals.</td>
<td></td>
</tr>
</tbody>
</table>

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AGENDA

1. Opening
   A. Reviewing Learning Targets (5 minutes)
   B. Beginning the Research Process: What Does It Mean to Research? (15 minutes)

2. Work Time
   A. Read-aloud and Paraphrasing Venom (15 minutes)
   B. Reading for the Gist and Examining Visuals— “Award-Winning Survival Skills” (20 minutes)

3. Closing and Assessment
   A. KWL: Animal Defense Mechanisms (5 minutes)

4. Homework
   A. “Award-Winning Survival Skills” Vocabulary

TEACHING NOTES

- This is the first of four lessons where students read the article Award-Winning Survival Skills. This article allows students to build background knowledge on the topic of animal defense mechanisms while at the same time practicing the key reading skills they will have to use independently later in this unit and Unit 2. In this lesson, students preview the visuals, then read the full article for the gist. For homework, students then reread the opening and circle challenging vocabulary. Then, in Lesson 3, students use vocabulary strategies as the reread three sections of the text. Finally, in Lesson 4, students reread these same sections to identify the main idea and supporting details.

- Note that over the course of these lessons, students do not read the “Hands-on Science: Master of Disguise” box on the last page of the article. You may invite students to read it on their own during independent reading or another time over the course of the module.

- Students use the Back-to-Back and Face-to-Face protocol in this lesson. Consider having students practice using this protocol prior to this lesson using topics that are of personal interest to them so when they use it with content, the protocol enhances the conversation and the focus is on the content.

- As in Lesson 1, students hear a portion of the book Venom read aloud. The Listening Closely note-catcher is introduced, and will be used and expanded upon in later lessons. This supports students in meeting the target: “I can paraphrase portions of a text that is read aloud to me.” Since this lesson is students’ first use of this note-catcher, its use is modeled during Opening Part A. If it’s difficult to read the text aloud and model using the organizer at the same time, consider inviting a “guest reader” to the class for the read-aloud of Venom; this guest reader might be the principal, another teacher, or a parent volunteer.

- During Lessons 2–4, students should work with a reading partner. Strategically partner students so they can support one another well as they read this complex text.

- Consider whether or not to have students use sticky notes to write their gist statements for each section of the text, or if students should write in the margins or on a separate sheet of paper.

- For homework, students reread the article and identify any challenging vocabulary words. These words will be used in Lesson 3 as a way to start the discussion about determining the meaning of unknown words when reading an informational text.

- In advance: Arrange for a guest reader for the read-aloud of Venom. Practice Back-to-Back and Face-to-Face protocol with questions/topics of personal interest to students.
### Agenda

<table>
<thead>
<tr>
<th>Teaching Notes (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Review: Back-to-Back and Face-to-Face protocol, as well as Fist to Five in Checking for Understanding techniques (see Appendix).</td>
</tr>
<tr>
<td>• Locate the Close Readers Do These Things anchor chart (from Module 1, Unit 1, Lesson 3) or recreate this chart to display. See Work Time B.</td>
</tr>
<tr>
<td>• Post: Learning targets.</td>
</tr>
</tbody>
</table>

### Lesson Vocabulary

- paraphrase, animal defense mechanisms, research, infer, visuals; contorts, impersonate, mimic

### Materials

- Equity sticks
- Performance Task anchor chart (from Lesson 1; teacher-created)
- *Venom* (book; for teacher read-aloud, cover and pages 16–17)
- Animal Defenses research journal (from Lesson 1)
- Listening Closely note-catcher (page 2 of Animal Defenses research journal; from Lesson 1; one per student and one to display)
- Listening Closely note-catcher (completed, for teacher reference)
- Document camera
- Close Readers Do These Things anchor chart (from Module 1, Unit 1, Lesson 3)
- “Award-Winning Survival Skills” (article; one per student and one to display)
- Examining Visuals note-catcher (page 3 of Animal Defenses research journal; from Lesson 1; one per student and one to display)
- Examining Visuals note-catcher (completed, for teacher reference)
- Sticky notes (optional; five per student)
- Animal Defense Mechanisms: KWL chart (page 1 of Animal Defenses research journal; from Lesson 1; one per student and one to display)
A. Reviewing Learning Targets (5 minutes)

- Use equity sticks to call on a student to read the first learning target:
  * “I can explain what it means to be a researcher.”
- Tell students that in this lesson, they will learn what it means to be a researcher or someone who deeply studies a topic.
- Use equity sticks to call on a student to read the next learning target:
  * “I can paraphrase information presented in a read-aloud on animal defense mechanisms.”
- Point to the word *paraphrase* and explain that to understand this learning target, students need to know the meaning of this word. Show them that it can be broken into its parts: *para-* meaning to come from, and *phrase* meaning a series of words. Taken together, “to come from words” should give them a clue about the word’s meaning.
- Ask students to reread the learning target with this in mind, then turn to a partner and explain what they think it means to paraphrase information from a read-aloud. Give students a few minutes to think and share; then use the equity sticks to call on a few pairs to share their explanations.
- Confirm that paraphrasing information means explaining something you have read or heard in your own words. If necessary, give an example.
- Read the last learning target:
  * “I can infer about a text by examining its visuals.”
- Underline the word *visuals*. Tell students that understanding the word *visuals* is important to understanding this learning target. Ask students to think about other words that sound like visual (such as vision or visible/invisible).
- Ask students to turn to a partner and share what they think this word means. Remind students to use their knowledge of similar words like vision or visible/invisible and other clues from the sentence (something found in the text) to determine the meaning of this word.
- Listen for responses like: “Visuals are something you can see, like a picture or drawing.” Confirm the meaning of this word and that students understand the learning target.

### Meeting Students’ Needs

- Discussing and clarifying the language of learning targets helps build academic vocabulary.
### B. Beginning the Research Process: What Does It Mean to Research? (15 minutes)

- Display the **Performance Task anchor chart** and reread the performance task prompt. Remind students that they will be working towards writing a choose-your-own-adventure narrative during this module.
- Tell students to think and talk about the performance task with a partner using the Back-to-Back, Face-to-Face protocol. Explain the protocol to students:
  1. When you hear me say, “Back-to-back,” get back-to-back with a partner.
  2. Listen for a question prompt, then think about your response to the question.
  3. When you hear me say, “Face-to-face,” turn to face your partner.
  4. Decide which partner will share first, and then take turns listening carefully while your partner is speaking.
  5. When you hear me say, “Back-to-back,” thank your partner and silently go back-to-back again.
- If necessary, briefly have two students model.
- Invite students to stand up and place themselves back-to-back with the person next to them. Ask them to think about what it means to research. Then say, “Face-to-face!” and repeat the prompt: “What does it mean to research?”
- Listen for responses like: “It means to study or collect information about a new topic.” Clarify the meaning of *research* if necessary.
- After students have shared, say, “Back-to-back” again to get students ready for a new question. Continue to use the protocol for students to discuss the following questions:
  * “Why is it important for writers to research?” Listen for responses like: “They need to know a lot about what they are going to write about, so that it will be interesting.”
  * “What are different ways writers might conduct, or do, research?” Listen for responses like: “They read about the topic,” or “They look online to learn about what they are going to write about.”

### Meeting Students’ Needs

- Examining the performance task closely provides motivation for student engagement in the topic, and gives purpose to reading a text closely.
- Whole class discussions encourage respectful and active listening, as well as social construction of knowledge.
- Consider posting the Back-to-Back, Face-to-Face questions for struggling students to see, or writing the questions down and giving these students an opportunity to preview the questions before this discussion.
Opening (continued)

- Gather students whole group and explain that writers often have to conduct research to learn about a topic they will write about. Preview the sequence of the three units in this module so students are oriented.
  - Under the performance task prompt, write: “Unit 1—Research: Animal Defense Mechanisms.” Explain that in this unit, they will learn about general animal defense mechanisms, and then do a deeper study of the defense mechanisms of the millipede. Next, write: “Unit 2—Research and Write: Build Expertise on a Selected Animal.” Tell students that in Unit 2, they will research in expert groups on different animals, and that this animal will be the main character in their narratives. However, before they can write their narrative, they have to research and write an informational piece about their animal and its defense mechanism.
  - Finally, write: “Unit 3—Write Narratives.” Explain that in this unit, students will read and examine a choose-your-own-adventure story to learn about this format and then plan and write their own narratives using the animal they researched as the main character.
  - Ask students to give you a thumbs-up if they have a general understanding of why they will become researchers on the topic of animal defense mechanisms, thumbs—sideways if they have a question, or a thumbs-down if they would like to meet for a one-on-one explanation of the task.

<table>
<thead>
<tr>
<th>Opening (continued)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
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<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>Mechanisms.” Explain that in this unit, they will learn about general animal</td>
<td></td>
</tr>
<tr>
<td>defense mechanisms, and then do a deeper study of the defense mechanisms of the</td>
<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
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<td></td>
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<tr>
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<tr>
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<td></td>
</tr>
<tr>
<td>- Ask students to give you a thumbs-up if they have a general understanding of why</td>
<td></td>
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<tr>
<td>they will become researchers on the topic of animal defense mechanisms, thumbs—</td>
<td></td>
</tr>
<tr>
<td>sideways if they have a question, or a thumbs-down if they would like to meet for a</td>
<td></td>
</tr>
<tr>
<td>one-on-one explanation of the task.</td>
<td></td>
</tr>
</tbody>
</table>
### Work Time

**A. Read-aloud and Paraphrasing *Venom* (15 minutes)**

- If you invited a guest reader to model this lesson, introduce that person to the students, sharing that s/he will be helping with the read-aloud of *Venom* today as you model how a listener can take notes and then paraphrase a text.

- Display the cover of *Venom* so all students can see. Open to pages 4 and 5 and ask:
  * “What did we learn about animal defense mechanisms when we read aloud *Venom* yesterday?”

- Listen for responses like: “Some animals use venom to protect themselves.” Validate responses and explain to students that they will listen to another section of *Venom* today.

- Ask students to get out their *Animal Defenses research journal* and turn to the *Listening Closely note-catcher* on page 2. Using a document camera, display a blank copy of the note-catcher. Explain to students that they will use this note-catcher to record information heard during the read-aloud.

- Explain to students there is a guest reader for today’s read-aloud so you can model how to use the note-catcher while he or she reads the text.

- Use equity sticks to call on a student to read the directions and headings of the table in the note-catcher. Answer any clarifying questions students have about the directions or the headings.

- Tell students that they will listen to the text read aloud several times. The first time they hear it, they should simply listen for the gist. The second time they hear it, they should begin to fill in the table.

- Invite the guest reader to read aloud pages 16 and 17 in *Venom*.

- Invite students to Think-Pair-Share. Ask:
  * “What was the gist of this text?”

- Use equity sticks to call on a student to share his or her partner’s response. Listen for responses like: “It was about how bees sting and how they sting,” or “It was about the defense mechanisms of bees.”

- Tell students that they will now hear page 17 read aloud a second time, and that you will model how to fill in the table while listening to the text read aloud. Explain that they do not need to write anything on their note-catchers at this time.

- Invite the guest reader to reread page 16. Ask students:
  * “After hearing this section of the text read again, what notes can we take, and in which box in our note-catcher would we put them?”

### Meeting Students’ Needs

- Reading the complex text aloud slowly, fluently, and without interruption or explanation promotes fluency for students by allowing them to hear a strong reader read with accuracy and expression.
### Work Time (continued)

- Listen for students to name various facts about bees from this section of the text. Listen for students to explain or point out that these are interesting facts about bees, but not related to their defense mechanisms and survival.

- Model recording a fact in the box headed “Other Facts about Bees and Wasps” and give students a few minutes to record any facts they found interesting in this section of the note-catcher.

- Next, invite the guest reader to reread page 17. Ask students:
  * “After hearing this section of the text read again, what did you hear that we can we record in our note-catchers?”

- Listen for students to suggest items that can be recorded in the “Examples of How Bees and Wasps Protect Themselves” and “How This Helps Bees and Wasps Survive” columns of the table. For example: “Bees produce a chemical signal” could be recorded in the first column and “This warns other bees of danger” could be recorded in the second column.

- Model taking notes for these pages of the text in the top row of the note-catcher (for pages 16–17) and ask students to record their notes along with you.

- Finally, ask students to reread their notes; then give students the following instructions for a Think-Pair-Share:
  1. Reread your notes from today’s reading of Venom.
  2. Think about how we could paraphrase what we heard today.
  3. Share with your partner how you would explain what this section of the text is about.

- Use equity sticks to call on several pairs to share how they would paraphrase the text. This allows students to hear the text paraphrased in a variety of ways. Listen for students to say something similar to: “This section of Venom was about bees, where they live, what they eat. It talked about how they use chemical signals and stingers with venom to protect their hives. And it explained that some people are allergic to bee venom and how this can be dangerous.”

- Point out to students that when paraphrasing, they should include the big ideas of what they listened to, but they don’t have to include every detail. Point out that rereading their notes will help them remember the big ideas of the text.

- Tell students that tomorrow they will continue reading more from this section and continue to practice paraphrasing. Encourage students to thank the guest reader.

### Meeting Students’ Needs

- • Listen for students to name various facts about bees from this section of the text. Listen for students to explain or point out that these are interesting facts about bees, but not related to their defense mechanisms and survival.

- • Model recording a fact in the box headed “Other Facts about Bees and Wasps” and give students a few minutes to record any facts they found interesting in this section of the note-catcher.

- • Next, invite the guest reader to reread page 17. Ask students:
  * “After hearing this section of the text read again, what did you hear that we can we record in our note-catchers?”

- • Listen for students to suggest items that can be recorded in the “Examples of How Bees and Wasps Protect Themselves” and “How This Helps Bees and Wasps Survive” columns of the table. For example: “Bees produce a chemical signal” could be recorded in the first column and “This warns other bees of danger” could be recorded in the second column.

- • Model taking notes for these pages of the text in the top row of the note-catcher (for pages 16–17) and ask students to record their notes along with you.

- • Finally, ask students to reread their notes; then give students the following instructions for a Think-Pair-Share:
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- • Tell students that tomorrow they will continue reading more from this section and continue to practice paraphrasing. Encourage students to thank the guest reader.
### Work Time (continued)

**B. Reading for the Gist and Examining Visuals—“Award-Winning Survival Skills” (20 minutes)**

- Place students with a partner for reading and explain that the class will continue to research animal defense mechanisms by reading an article closely for the next few lessons.
- Post and review the Close Readers Do These Things anchor chart (from Module 1, Unit 1, Lesson 3).
  - Read small chunks of text slowly and think about the gist.
  - Reread each passage one sentence at a time.
  - Underline things that you understand or know about.
  - Circle or underline words that you do not know.
  - Talk with your partners about all of your good ideas.
  - State the gist or message of the paragraph in the margin.
  - Listen to the questions.
  - Go back to the text to find answers to questions.
  - Talk with your partners about the answers you find.
- Tell students that the article they will read is challenging and may have unfamiliar words. Reassure them that just like when they read the Great Law of Peace, they are not expected to understand it fully the first time. Remind them that one key to being a strong reader of difficult text is being willing to struggle.
- Display and distribute “Award-Winning Survival Skills” to students. Build up the excitement; this text will be the first text they read and examine closely for their research.
- Invite students to look through the article, thinking about what they notice and wonder. Have students Think-Pair-Share these observations and questions. Use equity sticks to call on students to share with his or her peers what they noticed or wondered about the text. If no students point out the visuals in the article, say something like: “I notice visuals on each page.”
- Ask:
  - “How do visuals help you, the reader, to understand an informational text?” Listen for responses like: “Visuals help me to picture what the author is writing about,” or “Captions and labels on visuals explain the pictures in more detail, so I can better understand what I’m looking at.”

### Meeting Students’ Needs

- Graphic organizers and recording forms engage students more actively and provide the necessary scaffolding that is especially critical for learners with lower levels of language proficiency and/or learning. For students needing additional support, you may want to provide a partially filled-in graphic organizer.
- Provide ELLs with a sentence starter or frame to aid in language production. For example: *In the visual I see ...*
Work Time (continued)

- Display **Examining Visuals note-catcher** and invite students to open it to page 3 in their Animal Defenses research journals. Tell students that looking at visuals before reading a text can help them think more deeply about the text. Say something like: “Readers make inferences when looking at visuals just like when they read a text. After they examine a visual closely, they read the text, looking for details that support their inferences.”

- Explain that they will be using this note-catcher to record information and inferences about a visual in “Award-Winning Survival Skills.” Use equity sticks to call on a student to read the Steps 1–3 on the note-catcher and the headings of the first and middle columns (“Details from the Visual” and “My Inferences”). Clarify that students will complete the only first two columns prior to reading the text. Call on a student to read Steps 4 and 5 and the heading of the last column (“Details in the Text That Support My Inferences”). Clarify that students will read the article and then complete the last column.

- Invite students to look at page 2 of “Award-Winning Survival Skills” and display for students. Remind students that first they will look at the visual on the page and jot down notes about what they see in the visual in the “Details from the Visual” column.

- Notice details in the visual in a manner similar to the following: “The first big thing I notice is that this visual is broken into two parts—the top part and the bottom part. In the top part, I see a big photograph and a smaller photograph in a circle, and a caption. I see the same format in the bottom part—a big photograph and a smaller one in a circle, and another caption.”

- Next, ask the students to look closely at the visual and read along as you read the captions aloud.

- Explain the meaning of the word **contorts**, to bend in a way that seems impossible. Tell students that the words **impersonate** and **mimic** have similar meanings. Ask students to reread each caption with their partner and see if they can figure out the meanings of these words from the words in the sentence and the visuals.

- Ask a few pairs to share and listen for students to say these words mean “copy.” Prompt students to explain what clues they used in the captions or pictures to help them figure out the meaning of these words.

- Next, ask students to suggest notes that you can record in the first column of the note-catcher, “Details from the Visual.” Accept only details that can be found explicitly in the visual, “two pictures with a circle in each.” If students offer up an inference based on the visual, explain that you will record those next.

- Explain that now you would like them to infer about the visual. Remind students that in order to infer they must use both evidence that they see and what they know. Then, ask students to discuss the following question with their partner:

* “What can you infer about the mimic octopus based on this visual?”
Work Time (continued)

- Listen for students to say: “It copies other animals so it looks poisonous.” Prompt them to explain what evidence they used from the visual to make this inference. Record inferences in the second column.

- Next ask students to examine the remaining visuals in the text with their partners. Remind them that they should not yet fill out the third column of their note-catchers. Give students 10 minutes to examine the remaining visuals.

- Use equity sticks to call on students to share an inference. Tell students to use the sentence frame: “We infer _______ because the visual/caption shows/says _______.” Record what students share in the “My Inferences” column on the graphic organizer.

- Ask students to close their research journals. Tell them that the class will come back to the Examining Visuals note-catcher after a few days, when they have a deeper understanding of the text, to confirm what they inferred about the visuals.

- Distribute five sticky notes per student (optional; see Teaching Notes). Next, tell students that now you are going to read text aloud to them and that you would like them to read along silently and listen for the gist, or what it is mostly about.

- Read the text aloud and pause after each section of the text (once you reach a new heading) and ask students to turn to their partner to discuss the following question:
  * “What was that section of the text mostly about?”

- Use equity sticks to call on various pairs. As a class, agree on a gist statement for the section, and ask students to record a gist statement in the margin of their text, or on a sticky note.

- After the first read of the text is complete, ask for a final gist statement:
  * “Overall, what is this text about?”

- Listen for students to say something similar to: “Different animals and how they defend themselves.”

Meeting Students’ Needs

- Hearing a complex text read slowly, fluently, and without interruption or explanation promotes fluency for students; they are hearing a strong reader read the text aloud with accuracy and expression, and are simultaneously looking at and thinking about the words on the printed page. Set clear expectations that students read along silently in their heads as you read the text aloud.
### Closing and Assessment

<table>
<thead>
<tr>
<th>A. KWL: Animal Defense Mechanisms (5 minutes)</th>
<th>Meeting Students' Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Remind students that good researchers always reflect on and record what they’ve learned. Display your copy of the Animal Defense Mechanisms: KWL chart and invite students to turn to their chart on page 1 of their research journals.</td>
<td>• Consider adding visuals or symbols to the chart to support students.</td>
</tr>
<tr>
<td>• Invite students to Think-Pair-Share. Ask:</td>
<td></td>
</tr>
<tr>
<td>* “Were any of your questions answered in the text that you read today?”</td>
<td></td>
</tr>
<tr>
<td>* “What new information did you learn from this article?”</td>
<td></td>
</tr>
<tr>
<td>• Invite students to write the answers to any questions they had in the W column under the “I Learned” column, in the “Information” section. Include the name of the article in the “Source” column.</td>
<td></td>
</tr>
<tr>
<td>• Tell students to also add one new piece of information they learned from the article in the “I Learned” column.</td>
<td></td>
</tr>
<tr>
<td>• Post and preview the homework. If necessary, indicate which section of the text they will be rereading.</td>
<td></td>
</tr>
</tbody>
</table>

### Homework

<table>
<thead>
<tr>
<th>Meeting Students' Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reread the opening section of the “Award-Winning Survival Skills” read in today’s lesson. While you read, circle words that you do not know the meaning of. Choose one word you circled and try to figure out the meaning of it. Write down how you figured out what the word meant as well.</td>
</tr>
<tr>
<td>• For students who struggle to read complex text independently, consider allowing them to reread and circle unfamiliar vocabulary with a partner during guided and independent reading time.</td>
</tr>
</tbody>
</table>
**Source:** *Venom* pages 16–17 and 19–20

**Directions:** Listen as *Venom* is read aloud. Use the table below to record your notes.

<table>
<thead>
<tr>
<th>Examples of How Bees and Wasps Protect Themselves</th>
<th>How This Helps Bees and Wasps Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Venom pages 16–17</strong></td>
<td><strong>Completed in Lesson 2</strong></td>
</tr>
<tr>
<td>Completed in Lesson 2</td>
<td>Help to warn their hive of danger</td>
</tr>
<tr>
<td>• Bees have chemical signals called pheromones</td>
<td>The venom from the sting is really painful to scare away predators</td>
</tr>
<tr>
<td>• Bees have barbed stingers that stick into the victim</td>
<td></td>
</tr>
</tbody>
</table>

| **Venom pages 19–20 Completed in Lesson 3**      | **Completed in Lesson 3**             |
| **Completed in Lesson 3**                        | The sting hurts and scares attackers away |
| • Wasps sting                                     | The wasp won’t get caught and eaten or killed |
| • The velvet wasp runs from enemies               | The colors and stripes warn other animals that bees and wasps are venomous |
| • Most wasps and bees have yellow and black stripes |

| **Other Facts about Bees and Wasps**             | **Completed in Lessons 2 and 3**      |
| **Completed in Lessons 2 and 3**                 |                                      |
| • There are lots of different kinds of bees      |                                        |
| • Bees live in a colony and have different jobs |                                        |
| • Most bees eat nectar and pollen                |                                        |
| • There are many kinds of wasps                  |                                        |
| • Most wasps use their venom to eat other bugs   |                                        |
Animal Defenses Research Journal:
Listening Closely Note-Catcher
(For Teacher Reference)

Explain what this section of *Venom* was about?

This section of *Venom* was about bees and wasps and how they sting. It explained the different kinds of bees and wasps and how they live and what they eat. It explained that bees use their stingers and venom to protect their hive and wasps mostly use their venom to kill and eat bugs, but they will sting in self-defense, too. Most bees and wasps have yellow and black stripes and this warns that they are venomous.
It's a dog-eat-dog world out there—not to mention a snake-eat-lizard world. To survive and reproduce, every creature must avoid becoming another predator's meal. But how to elude a hungry hunter who's bigger or faster than you? Animals use some positively award-worthy strategies called defenses. "An animal's defenses are all that stand between being alive and being eaten," says biologist Tom Tregenza at the University of Leeds in the UK. The newly discovered mimic octopus, for example, fools marauders by impersonating an entire cast of less tempting prey. The flexible three-banded armadillo rolls itself up into a ball as impenetrable as an armored truck.

How did such an audacious array of animal defenses evolve in the first place? "In any large population there will be some variation," says biologist Ralph Turing at the Florida Institute of Technology. Members of a species develop slightly different traits (physical characteristics): One armadillo might possess more flexible armor than another. If an individual is lucky enough to possess a trait that saves it from being devoured, the animal may live long enough to reproduce and pass the trait on to its offspring. "Eventually that trait will become dominant in future generations," Turing says. The theory is called natural selection.

In a nutshell, life forms best suited to their environment survive over the long haul.

To learn more about some of nature's award-winning defenses, read on . . .

by Lea Winerman

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PRIZE FACT

Three-banded armadillos sport supreme design. They use hinged bands to roll themselves up into a ball.

Note to Hollywood special-effects creators: If you need to devise ingenious strategies for heroes to protect themselves against bloodthirsty attackers, take inspiration from the three-banded armadillo. While all armadillos sport leathery armored shells to fend off predators like ravenous wildcats, "three-banded armadillos are the only ones that curl themselves into completely enclosed balls," says Southwest Missouri State University biology professor Lynn Robbins.
The three-banded armadillo (Tolypeutes tricinctus) and southern three-banded armadillo (Tolypeutes matacus) live in South America. Their body shields consist of bony plates and a layer of horn or keratin, fibrous proteins that make up tissues such as hair and nails; the plates themselves are formed by ossified or hardened skin. On their shells, three hinged bands give them the flexibility to roll themselves up. Since the shoulder and haunch plates aren’t attached on the sides to the armadillos’ skin, there’s plenty of room inside to fit a head, legs, and tail. (The shells are also good insulators—they trap heat to help keep the creature active in winter.)

When threatened, armadillos curl up and leave only a tiny peephole from which to peer out at their predator. If touched, they snap totally shut. However, some fierce jaguars have been known to use their savage teeth and claws to crack open a tasty armadillo! Even the most dazzling special effects have their limits. . . .

The mimic octopus

Do you know an undiscovered superstar—a natural talent who can mimic others on demand? For years, divers in murky waters off Indonesia snapped photos of an octopus—an eight-armed invertebrate (no backbone)—that seemed to impersonate a cast of marine animals through mimicry, or looking like another species. When a group of scientists got hold of the images, they high-tailed it.

PRIZE FACT
It looks like the quick-change artist can mimic an exotic blenny species with bulging eye sockets and whiskers (inset).
to Indonesia last year to identify the extraordinary 60-centimeter (24-inch) long copycat—which they dubbed the mimic octopus.

Many animals mimic other creatures to turn off predators. The harmless milk snake, for example, resembles the poisonous coral snake with its bright red, yellow, and black bands. "But this octopus is the only animal we've found so far that can mimic more than one animal," says biologist Tom Tregenza at the University of Leeds. The octopus can ape at least three critters—the flatfish, lionfish, and sea snake. Tregenza's team claims to mimic the flatfish, the lumpy octopus speeds up, yanks in all eight arms, alters shape and color, and ripples its body in a wave!

Why imitate a slew of creatures? One clue: While many octopuses live and hide in reefs or rocks, the mimic octopus slinks along seafloor mud in plain sight. "There's nowhere to hide," Tregenza says. Besides, adds team scientist Roger Hanlon, "an octopus is a soft, juicy hunk of protein that everything else out there wants to eat." Flatfish are far more populous and less likely to attract attention.

How does this superstar perform its tricks? It features a flexible body that twists into multiple forms and skin cells called chromatophores, which contain various colored pigments. Muscles around each chromatophore constrict or expand the cell—when constricted, skin color lightens, when expanded color darkens. The octopus alters color patterns by constricting and expanding thousands of chromatophores at the same time. Next stop, Warner Brothers!

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**PRIZE FACT**
Is there a starring role in a Die Hard sequel for the pesky opossum? It also boasts a rare natural resistance to snakebite venom.

---

**BEST ACTOR IN A DEATH SCENE**

The opossum

Ever watch an actor croak—only to catch him breathing afterward? He should take lessons from the opossum, America's only marsupial (mammal that carries its young in a pouch). Many predators won't touch carrion, or dead animals. When threatened by wild dogs or coyotes, the slow-running opossum either heads for the nearest tree to climb or else "plays possum"—false death. It falls over, lies still on its side, eyes and mouth half open. Drool trickles from its mouth, its tongue lolling to one side. Most persuasive of all, it expels a green putrid-smelling substance from its anal glands. "Basically, it makes a big stinking mess," says University of Idaho biology professor Steven Austad. The opossum can remain in this state long enough for any predator to exit the scene. Now that's an Oscar-winning performance.

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Award-Winning Survival Skills:
How Animals Elude Predators

*nprize fact*
When this pufferfish inflates in self-defense, its skin projects razor-sharp spines that cover the body—making it look pretty unappetizing.

**BEST ACTION HERO**
The spiny pufferfish

Ordinarily, the meek spiny pufferfish (*Diodon holocanthus*) drifts slowly in its native coral-reef habitats around the world. Its round body and small fins make it a sluggish swimmer—and perfect prey. But just try to eat it, and get ready to be BLOWN AWAY! When threatened, the puffer inflates to three times its normal size. “It just swallows water until its stomach is completely full,” says biologist and pufferfish expert Ralph Turingan at the Florida Institute of Technology. How does the fish change shape? Its skin and stomach are super-stretchable. Also, it lacks a rib cage—no bones to impede an expanding stomach. Dare to swallow an uninflated puffer! “Sharks have actually died from a pufferfish inflating in their esophagus,” says Turingan. Other predators who’ve witnessed Superman in action stay clear of the Big Puffer!

**IT’S YOUR CHOICE**
Choose the correct answer(s) to these questions:

1. Which process might cause animal defenses to change over time?
   - A kin selection
   - B behavioral modification
   - C morphogenesis
   - D natural selection

2. Which of the following would most likely explain why the mimic octopus impersonates several animals?
   - A The mimic octopus is a slow swimmer.
   - B It lives in plain sight of other prey.
   - C It has small eyes, which make it a poor hunter.
   - D Mimicry is part of its mating process.

3. Pufferfish belong to the same family—clionidae—as porcupinefish and burrfish. Which defining feature do family members share?
   - A large fins
   - B bright coloring
   - C spiny skin
   - D small teeth

*Answers in Teacher’s Edition*
Award-Winning Survival Skills:
How Animals Elude Predators

The tortoise beetle

Do you cheer for revolving onscreen characters? The larva (immature form) of the tortoise beetle species Hemispharota cyanescens may nab the Oscar for nature’s most disgusting defense-maker. The palm-tree-dwelling bugs, which live in Florida and southern Georgia, cover themselves with an elaborately woven thatch of their own feces. They extrude strands of feces from an “anal turret,” which twirls to show out the strands in all directions. The feces are dry, odorless, and chemically inert (inactive). Still, most predators won’t go near the stuff. “People react with ‘yuck,’ and my guess is so do predators,” says expert Thomas Eisner, a Cornell University ecologist (scientist who studies the environment). “There’s a rule in nature: You don’t mess with feces, because it can carry parasites and microbial diseases.”

Unfortunately, no protection works 100 percent of the time. “If you look hard enough at the defense of any animal, somebody manages to crash through it,” Eisner says. The adult carabid beetle chomps right through the fecal shield to reach tempting larvae underneath. “If an animal like the tortoise beetle is rejected by a lot of predators, it’s an incredibly desirable resource to a hunter, because no one else is competing to eat the animal,” says Eisner. “If you can crash through its defense, as the carabid beetle does, you’ve got it made.”

MASTER OF DISGUISE

Some animals escape predators by camouflage—concealing themselves by blending into their immediate physical environment. Follow this experiment to find out how they do it.

You Need:
- 1 small rock
- 1 large photograph of any natural landscape (cut out one from a magazine)
- construction paper
- leaves
- flower petals
- colored pencils or markers
- tape
- glue
- scissors
- writing paper
- pencil or pen

To Do:
1. Study the natural features of the photograph you selected. What would a species need to camouflage itself in the environment?
2. You have to hide your species (a small rock) in the photograph.
3. You can select only three of these items to construct your species’ disguise: construction paper, leaves, flower petals, colored pencils or markers.

Science World 13

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Animal Defense Mechanisms: Examining Visuals  
(For Teacher Reference)

1. Look at the visual on page 2 of “Award-Winning Survival Skills: How Animals Elude Prey.”
2. In the first column of the graphic organizer below, record three details you see in the visual.
3. In the second column of the graphic organizer, record the inferences you make based on these details.

**NOTE: Do NOT complete the right-hand column of the graphic organizer yet!

4. Read the article.
5. In the right-hand column of the graphic organizer, record details from the text that support your inferences in the middle column.

<table>
<thead>
<tr>
<th>Details from the Visual (explicit information)</th>
<th>My Inferences (what I infer about this animal)</th>
<th>Details in the Text That Support My Inferences (confirmed with explicit information)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Underwater</td>
<td>• The mimic octopus tricks other animals into thinking it’s a lionfish. Lionfish are poisonous, so other animals probably know this and stay away from them. Since the mimic octopus looks like the lionfish, other animals probably stay away from them, too, because they think the octopus is a lionfish and will poison them.</td>
<td>REMINDER TO TEACHERS: This column will not be completed with students until Lesson 4.</td>
</tr>
<tr>
<td>• Mimic octopus</td>
<td>• The mimic octopus tricks other animals into thinking it’s a blenny species by bulging its eye sockets.</td>
<td>“Many animals mimic other creatures to turn off predators.” (page 3)</td>
</tr>
<tr>
<td>• Orangeish-red stripes</td>
<td></td>
<td>“But this octopus is the only animal we’ve found that can mimic more than one animal.” (page 3)</td>
</tr>
<tr>
<td>• Stripes look like a lionfish</td>
<td></td>
<td>“The octopus can ape at least three critters—the flatfish, lionfish, and sea snake, Tregenza’s team claims.” (page 3)</td>
</tr>
<tr>
<td>• Can bulge eye sockets and tentacles and looks like a blenny species</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Grade 4: Module 2B: Unit 1: Lesson 3
A Closer Read for Vocabulary: Words Related to Animal Defenses
## A Closer Read for Vocabulary:
Words Related to Animal Defenses

### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can paraphrase portions of a text that is read aloud to me. (SL.4.2)
- I can determine the meaning of academic words or phrases in an informational text. (RI.4.4)
- I can determine the meaning of content words or phrases in an informational text. (RI.4.4)
- I can use a variety of strategies to read words. (RF.4.3)
- I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can paraphrase information presented in a read-aloud on animal defense mechanisms.</td>
<td>• Listening Closely note-catcher (page 2 of Animal Defenses research journal)</td>
</tr>
<tr>
<td>• I can use different strategies to help me read unfamiliar words.</td>
<td>• Glossary (pages 24–26 Animal Defenses research journal)</td>
</tr>
<tr>
<td>• I can determine the meanings of unfamiliar words to help me better understand “Award-Winning Survival Skills.”</td>
<td></td>
</tr>
</tbody>
</table>
# Agenda

<table>
<thead>
<tr>
<th>1. Opening</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Reviewing Learning Targets (5 minutes)</td>
<td>• This is the second lesson in which students read the article “Award-Winning Survival Skills.” In this lesson, students reread to determine the meaning of challenging vocabulary in the following sections of the text: the opening; “Best Special Effect: The three-banded armadillo”; “Best Impersonator: The mimic octopus”; and “Best Action Hero: The spiny pufferfish” (for homework). Students are also introduced to the glossary in their Animal Defenses research journal, which they will use to record the definitions of important words they are likely to read or use in their writing during this module.</td>
</tr>
<tr>
<td>B. Engaging the Reader: Read-aloud of <em>Venom</em> (10 minutes)</td>
<td>Students again hear a portion of <em>Venom</em> read aloud. They use the Listening Closely note-catcher in the same way as in Lesson 2, with the addition of recording a gist statement. Writing a gist statement allows students to paraphrase the section of the text they heard read aloud.</td>
</tr>
</tbody>
</table>

| 2. Work Time | |
| --- | |
| A. A Closer Look at Words: Guided Practice (15 minutes) | • This lesson introduces the Animal Defense Mechanisms glossary and Word Wall. See supporting materials for more details about how the Word Wall should be set up. Students will refer to this and their glossaries throughout the module for discussion and writing. |
| B. A Closer Look at Words: Partner Practice (20 minutes) | • For this lesson, students will practice determining word meaning using primarily context clues, but you also may want to have some dictionaries on hand. |

<table>
<thead>
<tr>
<th>3. Closing and Assessment</th>
<th>In advance: Record directions for partner practice in Work Time B:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Introducing the Word Wall (5 minutes)</td>
<td>1. Write each of the assigned words on a sticky note.</td>
</tr>
<tr>
<td>B. Preparing for Homework (5 minutes)</td>
<td>2. With your partners, reread the section and locate each of the words.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Homework</th>
<th>3. Use the vocabulary strategies to determine the meaning of each word and record it on a sticky note.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. A Closer Look at Words in the “Best Action Hero” Section of “Award Winning Survival Skills”</td>
<td>4. Reread the text with your partners.</td>
</tr>
<tr>
<td></td>
<td>5. Discuss the following question: How does understanding these words help you understand the text?</td>
</tr>
</tbody>
</table>

• Review: Fist to Five in Checking for Understanding techniques (see Appendix).

• Post: Learning targets.
### Lesson Vocabulary

- glossary, word wall, text features;
- elude, impersonating, audacious,
- possess, traits, defenses, poison,
- venom, survive, predator, prey,
- sport, consist, threatened, mimicry,
- ape, imitate

### Materials

- Equity sticks
- Animal Defenses research journals (from Lesson 1)
- Listening Closely note-catcher (page 2 of Animal Defenses research journal; one per student and one to display)
- Listening Closely note-catcher (completed, for teacher reference, from Lesson 2)
- “Award-Winning Survival Skills” (from Lesson 2; one per student and one to display)
- Vocabulary Strategies anchor chart (new; co-created with students during Work Time Part B)
- Animal Defense Mechanisms Glossary (page 26–28 of Animal Defenses research journal; one per student and one to display)
- Animal Defense Mechanisms Glossary (completed, for teacher reference)
- Sticky notes (several per student and then six per pair)
- Animal Defense Mechanisms Word Wall: Teacher Directions (for teacher reference)
- Large sheet of chart paper or section of the black/white board prepared for Animal Defense Mechanisms Word Wall (see Teaching Notes)
- 7 standard sized index cards (for Animal Defense Mechanisms Word Wall words)
### Opening

#### A. Reviewing Learning Targets (5 minutes)
- Use **equity sticks** to call on a student to read the following learning target:
  * “I can paraphrase information presented in a read-aloud on animal defense mechanisms.”
- Explain to students that this learning target is the same as the last lesson. Explain that they will continue to focus on paraphrasing today when they hear more of the text *Venom* read aloud. Ask a student to recall and explain the meaning of *paraphrase* and clarify if necessary.
- Use equity sticks to call on students to read the next two learning targets:
  * “I can use different strategies to help me read unfamiliar words.”
  * “I can determine the meanings of unfamiliar words to help me better understand ‘Award-Winning Survival Skills.’”
- Remind students that this is something close readers do: pay special attention to unfamiliar words to better understand a text. Tell them that today the class will generate a list of strategies to help them read and determine the meaning of unfamiliar or challenging words.
- For each learning target, have students give you a Fist to Five to self-assess how close they think they are to being able to meet these targets (with five fingers indicating that they can teach this lesson to the class, four to three fingers indicating that they are close to meeting these targets with a little support, two fingers to one finger indicating that they know what these targets mean, but they need support, and a fist if they are unsure what the targets mean).

#### B. Engaging the Reader: Read-aloud of *Venom* (10 minutes)
- Display the cover of *Venom* so all students can see. Open to pages 16 and 17 and ask:
  * “What did we learn about animal defense mechanisms when we read aloud *Venom* yesterday?”
- Listen for responses like: “Bees can sting and send chemical signals to protect themselves.” Validate responses and explain to students that they will listen to another section of *Venom* today that shares information about a close relative to the bee: wasps.
A Closer Read for Vocabulary:
Words Related to Animal Defenses

<table>
<thead>
<tr>
<th>Opening (continued)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Display the Listening Closely note-catcher (from Lesson 2; page 2 of their Animal Defense research journals) and invite students to turn to the same note-catcher in their Animal Defenses research journals. Remind students that they will use this note-catcher to record information heard during the read-aloud.</td>
<td>• To further support students, consider rereading pages 16–17 and 19–20 prior to having them review their notes and paraphrase the text with a partner.</td>
</tr>
<tr>
<td>• Use equity sticks to call on students. Ask:</td>
<td></td>
</tr>
<tr>
<td>* “What kind of information do we record in each part of this note-catcher?”</td>
<td></td>
</tr>
<tr>
<td>• Listen for responses like: “We record how bees and wasps protect themselves in the first column, and explain how that helps the bees and wasps survive in the second column, and we record other facts about bees and wasps box at the bottom of the chart.”</td>
<td></td>
</tr>
<tr>
<td>• Point out where students will take notes about wasps today and the prompt at the bottom of the note-catcher where they will paraphrase the text: “What is the gist of this section of Venom?” Explain that they don’t have to write anything here just yet, and that they will talk about this after listening to this section of Venom.</td>
<td></td>
</tr>
<tr>
<td>• Remind students that just like when they read about bees, they will get to hear you read about wasps several times. And for the first time they hear it read aloud, they should simply listen to what is being read. The second time, they should begin to fill in the table.</td>
<td></td>
</tr>
<tr>
<td>• Tell students you will read pages 19–20 aloud, and remind them that they should just listen to what is being read.</td>
<td></td>
</tr>
<tr>
<td>• Read pages 19 and 20 (make sure to read both sections on page 20, “It Ain’t an Ant” and “Color Me Toxic”).</td>
<td></td>
</tr>
<tr>
<td>• Then invite students to turn and talk with a neighbor, sharing what this section was mostly about. Listen for students to say: “It was about different kinds of wasps, what they eat, and how they use their venom.”</td>
<td></td>
</tr>
<tr>
<td>• Explain to students that they will now hear pages 19 and 20 read aloud a second time. Tell students they should now record notes in the note-catcher as you read aloud.</td>
<td></td>
</tr>
<tr>
<td>• Read aloud pages 19 and 20 in Venom, stopping briefly after each paragraph. If necessary during each short pause, remind students to fill in notes on their note-catchers.</td>
<td></td>
</tr>
<tr>
<td>• After this second read of the text, ask students to turn to a partner and share their notes. Tell them they can add to or revise their notes with their partners.</td>
<td></td>
</tr>
<tr>
<td>• Use equity sticks to call on pairs to share notes that they have added. Using the Listening Closely note-catcher (completed, for teacher reference) as a reference, confirm with the class what should be recorded in the chart on the note-catcher for wasps.</td>
<td></td>
</tr>
</tbody>
</table>
Opening (continued)

- Next, ask:
  * “How would you paraphrase this section of Venom?”

- Listen for responses like: “It was about different kinds of wasps and how they use their venom and why bees and wasps have stripes.” If necessary, point out the section titled “Color Me Toxic” and prompt students by asking: “What was this part of the text mostly about?”

- Tell students that now you would like them to practice paraphrasing what was read about bees and wasps. Ask them to do the following:
  1. Look at your notes for bees and wasps.
  2. Turn to your partner and verbally paraphrase pages 16–20 of Venom, using their notes as a reference.

- Call on a few pairs to share how they paraphrased. Listen for students’ statements to include:
  - This section of Venom was about different kinds of bees and wasps.
  - It explained that bees use chemical signals and stingers for defense.
  - It explained that wasps also use their venom for defense, but mostly to catch the bugs they eat.
  - It explained that many bees and wasps have stripes to warn attackers that they can sting.

- Point to the question below the table on the graphic organizer—“What is the gist of this section of Venom?” Tell students that whenever they give the gist of a text, they are paraphrasing it. Ask the class to help you generate a gist statement that paraphrases pages 16–17 and pages 19–20 and copy this statement into their note-catchers.

- Remind students they will have many more opportunities to read this book, and can read through it on their own during independent reading or in their free time during the school day if they wish.
## Work Time

### A. A Closer Look at Words: Guided Practice (15 minutes)
- Place student with a reading partner and ask them to get out their copies of "Award-Winning Survival Skills" to read along as you reread the opening paragraph of the text.
- Then review the homework from Lesson 2: "Reread the 'Award-Winning Survival Skills' read in today’s lesson. While you read, circle words you do not know the meaning of. Choose one word you circled and try to figure out the meaning of it. Write down how you figured out what the word meant as well."
- Invite students to turn and talk, asking:
  * “What words did you circle that you didn’t know the meaning of?”
- Use equity sticks to call on students to share some words. List these words on the board. Students may identify: **survive**, **predator**, **defense**, **mimic**, **trait**, **reproduce**, **avoid**, **elude**, **marauders**, **impersonating**, **impenetrable**, **audacious**, **array**, **possess**, and **offspring**.
- Ask students to turn their partner and share which word they tried to figure out the meaning of and the strategy they used to do this.
- Use equity sticks to call on a few pairs to share their words and strategies.
- Tell students that they have learned a lot about how to figure out new words. Now, they get to use that knowledge. Begin a new **Vocabulary Strategies anchor chart**. Underneath the title, write: “The ways we make meaning of new words …” Ask:
  * “What strategies have we used to figure out new words in the past?”
- Give students a moment to think. Then use equity sticks to select students to share their thinking. Record students’ thinking and add your own as necessary. (Some students may say: “Ask my mom,” or “Ask the teacher.” If they do, tell them that this is one good approach, but should not be the first or only strategy they use).
- The chart should contain something such as:
  - read on in the text and infer
  - think about parts of the word that you know (like word roots)
  - look in the glossary
  - look for a text feature that defines the word
- Asking students to identify challenging vocabulary helps them monitor their understanding of a complex text. When students annotate the text by circling these words, it can also provide a formative assessment for the teacher.
- Step-by-step instructions in an anchor chart assists students in completing independent activities.
Work Time (continued)

- look in a dictionary
- discuss a word with another person (after attempting some of the above strategies)

• Use some of the strategies to determine the meanings of the following challenging words from the text. Encourage students to help you.
  - *elude* (avoid or escape): infer from the text
  - *impersonating* (to look and act like another person): look for the root word
  - *audacious* (to take bold risks): use the dictionary
  - *possess* (have or own): infer from the text
  - *traits* (physical characteristics): defined in text in parenthesis

• Tell students that they now will try some of these strategies while rereading a few sections of “Award-Winning Survival Skills” to determine the meaning of some more challenging words.

• Invite students to open to the Animal Defense Mechanisms glossary (pages 24–26 of their Animal Defense research journals) and tell students that they will build their own glossary to keep track of the words they learn related to animal defenses.

• Show students the glossary in the back of Venom and remind students that a glossary is a text feature authors often use in nonfiction texts, and they are found at the end of books. Also remind students that they are formatted so the words appear in alphabetical order.

• Explain to students that they will add words to the glossary in their research journals throughout the module, and will refer back to it during class discussions and when they plan and write the performance task.

• Explain that they will find the word they are defining in the glossary, then write the definition, then write the vocabulary strategy they used to determine the meaning of that word, and then draw a quick sketch or diagram showing what that word means.

• Point out the words *defenses/defense mechanisms* and *venom* as completed examples in the glossary. Remind students that they have determined the meanings of these words during the reading of Venom. Have them quickly draw a sketch to help remember the meaning of each of these words.
A Closer Read for Vocabulary: Words Related to Animal Defenses

Work Time (continued)

- Model adding a new word to the glossary using the word *survive* in the opening of “Award-Winning Survival Skills”:
  - Reread the opening paragraph and circle the word *survive* in the second sentence.
  - Explain that the text makes you think this word means “live,” but that you want to confirm this.
  - Demonstrate using the Vocabulary Strategies anchor chart to select a strategy for determining the word, and tell students that your strategy will be to read the text around the word and infer.
  - Reread the first three sentences of the opening.
  - Think aloud in a way similar to the following: “The first sentence talks about animals eating one another, and the sentence with the word *survive* talks about avoiding or trying not to become a meal. The third sentence talks about eluding, or getting away from hungry hunters, so what I inferred about the meaning of survival is right. It means to stay alive, in this case by not being eaten.”
- Ask students to help you find this word in their Animal Defense Mechanisms glossary and complete the entry for this word as a class.
- Ask if students have any questions about how they should complete word entries in their glossaries. Clarify as necessary.
- Tell students that now it is their turn to practice determining the meaning of a word with their partners. Explain that they should focus on inferring by using clues in the text, as well as talking with their partners about the meaning of the word. Reread the first three sentences in the opening of the text and ask:
  * “What does the word *predator* mean?”
- Allow students a few minutes to talk with their partners, then use equity sticks to call on a few pairs to share how they inferred the meaning of this word. Listen for students to point out the sentence that follows this word and the mention of “hungry hunters” as a clue in the text.
- Continue by reading the next three sentences of the text: “Animals use some positively award-worthy strategies called defenses. ‘An animal’s defenses are all that stand between being alive and being eaten,’ says biologist Tom Tregenza at the University of Leeds in the UK. The newly discovered mimic octopus, for example, fools marauders by impersonating an entire cast of less tempting prey.” Ask:
  * “What does the word *prey* mean? What words in these sentences provide clues to this word’s meaning?”
- Allow students a few minutes to talk with their partners, then use equity sticks to call on a few pairs to share how they inferred the meaning of this word. Listen for students to infer that *prey* is the name for animals that predators eat. Point out that the word “tempting” is a clue in the text that helps readers infer the meaning of this word.

Meeting Students’ Needs

- Defining challenging words as words that are unfamiliar or used in unusual or unfamiliar ways helps student identify both domain and academic vocabulary. It also allows students to feel more comfortable identifying words that are seemingly simple. Support your class in understanding that when familiar words are used in different or unusual ways, they can still pose a challenge for readers.
Work Time (continued) | Meeting Students’ Needs
---|---
• Tell students to find both of these words in their glossaries and record an entry. Give students 5 minutes to work with their partner.
• Call on a few pairs to share their glossary entries and clarify the meaning of these words if necessary. Allow students to revise their entries as needed. Determine whether Work Time B should be more guided practice or independent partner work.

### B. A Closer Look at Words: Partner Practice (20 minutes)
• Tell students that you are going to reread two more sections and ask them to circle challenging words. After each section, they will work with their partner to practice using the vocabulary strategies for determining the meaning of some of the words. Then, as a class they will record some of the words into the glossary.

• Review the directions posted in advance of the lesson with students:
  1. Write each of the assigned words on a sticky note.
  2. With your partners, reread the section and locate each of the words.
  3. Use the vocabulary strategies to determine the meaning of each word and record it on a sticky note.
  4. Reread the text with your partners.
  5. Discuss the following question: How does understanding these words help you understand the text?

• Clarify the directions as needed.
• Distribute sticky notes (six per pair of students). Ask students to write the following words on each of their sticky notes: *sport*, *consist*, *threatened*, *mimicry*, *ape*, *imitate*.

• Point out that in this text the words *sport* and *ape* are used with different meanings than what students are used to, so this is why you have selected these as challenging words, even though they are familiar.

• Ask students to follow along as you reread the next two sections of the text, “Best Special Effect: The three-banded armadillo” and “Best Impersonator: The mimic octopus.” As you read, point out the assigned words in the text for students.

• Give students 10 minutes to work on determining the meaning of the words. Circulate and support pairs as needed. If necessary, ask questions like: “How did you figure out the meaning of that word?” or “Are there any clues in the article that can help you figure out what that word means?” Listen for students discussing the meanings of the words and using strategies from the Vocabulary Strategies anchor chart when determining the meanings.

• To further support students, give them a hint card with the following tips for determining the meaning of the assigned words:
  – *Sport*: this word has a different meaning than it usually does; use the text to infer.
  – *Consist*: the prefix of this word “con-” means “with or together.”
  – *Threatened*: the root of this word is threat, which means something that can hurt.
  – *Mimicry*: look for a text feature that defines this word.
  – *Ape*: in the text this word is used as a verb (action) and has a different meaning than usual.
  – *Imitate*: try inferring this word from the text.
### Work Time (continued)

<table>
<thead>
<tr>
<th>Work Time (continued)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cold call partners to reread the sentences that contain each word and share definitions they recorded on a sticky note. Clarify the definition of each word if necessary.</td>
<td>• To further support students in sharing how understanding words helps them understand the text, provide a sentence frame: “Now that I know _______ means ______, this helps me understand _______.”</td>
</tr>
<tr>
<td>• Congratulate students on their hard work as word detectives. Ask:</td>
<td></td>
</tr>
<tr>
<td>* “How does understanding the meaning of these words help you better understand the text?” Prompt students to give examples from the text.</td>
<td></td>
</tr>
<tr>
<td>• Explain all of these are important words to know the meanings of, but some they are likely to see again when they read about animal defense mechanisms and they may need to use them later when writing their narratives.</td>
<td></td>
</tr>
<tr>
<td>• Ask students to find the words <em>threaten</em> and <em>mimic/mimicry</em> in their Animal Defense Mechanisms glossary and record the meanings with their partner.</td>
<td></td>
</tr>
</tbody>
</table>
### Closing and Assessment

**A. Introducing the Word Wall (5 minutes)**
- Point out the **Animal Defense Mechanisms Word Wall** to students. Explain that the Word Wall is another place to gather words about the topic they are studying. Explain that students can use their glossaries as individuals, but that the Word Wall is where the class will keep track of vocabulary; this will help during class discussions.
- Explain the format of the Word Wall—words are grouped alphabetically; only words are displayed, no definitions; words will be added to the Word Wall over the course of the module. Explain that students can refer to the Word Wall during discussions with peers or when writing as a way to use scientific vocabulary when discussing a topic.
- Show students the new **Word Wall cards** with the words *defense mechanisms, mimicry, predator, prey, survive, threaten, and venom* written on each card. Use equity sticks to choose students to add the cards to the Word Wall.
- Invite students to use the Fist to Five checking for understanding technique to briefly reflect on the learning target: “I can determine the meanings of unfamiliar words to help me better understand ‘Award-Winning Survival Skills,’” with a fist being “I am not confident that I can meet this target on my own” and a five being “I can determine the meaning of an unfamiliar word on my own.” Note students who show a fist, one, or two fingers to provide further support in Lesson 4. Tell students that they will revisit this target and practice using the glossary and Vocabulary Strategies anchor chart in the next lesson and will continue to figure out more about it.

**Meeting Students’ Needs**
- To support ELL students, consider adding visuals for each word on the Word Wall. The class can co-construct these and it will help to make the meanings of these words more memorable for all students.

### B. Preparing for Homework (5 minutes)
- Post the homework assignment on the board and review it as needed. Tell students that to help them prepare for the homework, you would like them to read along and circle the assigned words as you read aloud to them.
- Read the section titled “Best Action Hero: The spiny pufferfish.” Be sure that students have circled the assigned words for their homework.

**Homework**
- Reread the section “Best Action Hero: The spiny pufferfish.” Use the vocabulary strategies to determine the meaning of the following words: *habitat, sluggish, and inflate*. Write what you think each word means and the strategy you used to find the meaning. Hint: Text features, root words, and inferring are strategies you can use to figure out the meaning of these words.

**Meeting Students’ Needs**
- This homework will act as a formative assessment of RF.4.3 and L.4.4. To further support students, have them reread the text with a partner several times before taking it home for homework.
Grade 4: Module 2B: Unit 1: Lesson 3
Supporting Materials

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Teacher Directions: Write the following underneath on chart paper to create this anchor chart.

Vocabulary Strategies

- read on in the text and infer
- think about parts of the word that you know (like word roots)
- look in the glossary
- look for a text feature that defines the word
- look in a dictionary
- discuss a word with another person (after attempting some of the above strategies)
## Animal Defenses Research Journal: Glossary (Pages 24–26)
(Completed, For Teacher Reference)

<table>
<thead>
<tr>
<th>Word/Phrase</th>
<th>Definition</th>
<th>Vocabulary strategy I used to learn this word:</th>
<th>Sketch/Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>defenses/defense mechanisms</td>
<td>traits or behaviors that protect animals</td>
<td>inferred from the text</td>
<td>sword and shield</td>
</tr>
<tr>
<td>entrap</td>
<td>to catch something in a trap</td>
<td>think about parts of the word that you know</td>
<td>spider with an enemy on its web</td>
</tr>
<tr>
<td>extract</td>
<td>to pull out</td>
<td>think about parts of the word that you know</td>
<td>pulling a plant out of the ground</td>
</tr>
<tr>
<td>frantically</td>
<td>to do something wild with fear</td>
<td>think about parts of the word that you know</td>
<td>ants trying to clean off sticky fluid</td>
</tr>
<tr>
<td>habitat</td>
<td>a place where an animal lives</td>
<td>inferred from the text</td>
<td>trees and a pond</td>
</tr>
<tr>
<td>injecting</td>
<td>to force a liquid into something</td>
<td>think about parts of the word that you know</td>
<td>mosquito stinging a person</td>
</tr>
<tr>
<td>living</td>
<td>alive</td>
<td>think about parts of the word that you know</td>
<td>flower growing</td>
</tr>
<tr>
<td>mimicry</td>
<td>defense of looking like another animal</td>
<td>defined in the text</td>
<td>octopus and a snake</td>
</tr>
<tr>
<td>predator</td>
<td>animal that hunts and eats other animals</td>
<td>inferred from text</td>
<td>wolf</td>
</tr>
<tr>
<td>prey</td>
<td>animal that is eaten</td>
<td>inferred from text</td>
<td>rabbit</td>
</tr>
<tr>
<td>Word/Phrase</td>
<td>Definition</td>
<td>Vocabulary strategy I used to learn this word:</td>
<td>Sketch/Diagram</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>prey</td>
<td>animal that is eaten</td>
<td>inferred from text</td>
<td>rabbit</td>
</tr>
<tr>
<td>poisonous</td>
<td>having poison; toxic</td>
<td>think about parts of the word that you know</td>
<td>monarch butterfly</td>
</tr>
<tr>
<td>quickly</td>
<td>doing something fast</td>
<td>think about parts of the word that you know</td>
<td>rabbit hopping</td>
</tr>
<tr>
<td>seizes</td>
<td>grabs, take hold</td>
<td>think about parts of the word that you know</td>
<td>toad catching a millipede</td>
</tr>
<tr>
<td>survive</td>
<td>to live</td>
<td>inferred from text</td>
<td>arm with flexed muscle</td>
</tr>
<tr>
<td>threaten</td>
<td>in danger</td>
<td>think about parts of the word that you know</td>
<td>scared face</td>
</tr>
<tr>
<td>unpleasant</td>
<td>not pleasing</td>
<td>think about parts of the word that you know</td>
<td>frowning face</td>
</tr>
<tr>
<td>venom</td>
<td>toxin that is injected with a stinger, fang, or spine</td>
<td>defined in glossary of text</td>
<td>snake with fangs</td>
</tr>
<tr>
<td>warning</td>
<td>a sign of something bad coming</td>
<td>think about parts of the word that you know</td>
<td>person calling a warning to someone else</td>
</tr>
</tbody>
</table>
Note: This Word Wall will eventually hold words in five categories—general animal defenses (building background knowledge on the topic) and the four expert group animals (independent student research) begun in unit 2.

In this lesson, students will only put words in the “General Animal Defenses” category. Do not yet label the other categories. If students ask about why the Word Wall is divided up, simply respond that they will learn more about this in unit 2.

On a bulletin board that is easily referenced by students and at a level where students can access it, create the following:

<table>
<thead>
<tr>
<th>Animal Defense Mechanisms Word Wall</th>
<th>Mimic Octopus Defenses (do not label this until unit 2)</th>
<th>Monarch Defenses (do not label this until unit 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Animal Defenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Springbok Gazelle Defenses (do not label this until unit 2)</td>
<td>Three-Banded Armadillo Defenses (do not label this until unit 2)</td>
</tr>
</tbody>
</table>
Grade 4: Module 2B: Unit 1: Lesson 4
A Closer Read for Main Ideas: What Is Important about Animal Defenses?
# A Closer Read for Main Ideas:
What Is Important about Animal Defenses?

## Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

| I can paraphrase portions of a text that is read aloud to me. (SL.4.2) |
| I can determine the main idea using specific details from the text. (RI.4.2) |
| I can determine the meaning of academic words or phrases in an informational text. (RL.4.4) |
| I can determine the meaning of content words or phrases in an informational text. (RI.4.4) |

## Supporting Learning Targets

<table>
<thead>
<tr>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Listening Closely note-catcher (page 4 of Animal Defenses research journal)</td>
</tr>
<tr>
<td>• Determining the Main Idea note-catcher (pages 5 and 6 of Animal Defenses research journal)</td>
</tr>
</tbody>
</table>

- I can paraphrase information presented in a read-aloud on animal defense mechanisms.
- I can determine the main idea of sections of “Award-Winning Survival Skills.”
- I can identify details that support the main idea of sections of “Award-Winning Survival Skills.”
## Agenda

<table>
<thead>
<tr>
<th></th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Opening</td>
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<td></td>
<td>A. Reviewing Learning Targets (5 minutes)</td>
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<td>B. Engaging the Reader: Read-aloud of Venom (10 minutes)</td>
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<td>2. Work Time</td>
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<td>A. Determining Main Ideas and Supporting Details: Guided Practice (15 minutes)</td>
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<td></td>
<td>B. Determining Main Ideas and Supporting Details: Partner Practice (20 minutes)</td>
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<td></td>
<td>C. Ticket: Confirming Inferences from Visuals (5 minutes)</td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
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</tr>
<tr>
<td></td>
<td>A. Animal Defense Mechanisms: KWL Chart (5 minutes)</td>
</tr>
<tr>
<td>4. Homework</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Continue your independent reading.</td>
</tr>
</tbody>
</table>

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- This lesson opens with the routine of hearing a few pages of *Venom* read aloud. Students use the Listening Closely note-catcher in the same way as in Lesson 3, completing the table and writing a gist statement after. This allows them to practice paraphrasing the text heard aloud, helping them to work toward meeting the SL.4.2 standard. Repetition of this routine allows students to master this speaking and listening standard.

- This is the third and final lesson where students read the article “Award-Winning Survival Skills.” In this lesson, students reread the article to determine the main idea of selected sections, first with teacher support, and then with their partners. In the lessons that follow, students will practice these skills in a more independent fashion when they are introduced to the central text, *Animal Behavior: Animal Defenses*.

- Note: Students will reread an excerpt of “Award Winning Survival Skills,” called “Best Action Hero: The spiny pufferfish” as a part of their mid and end of unit assessment in Unit 2. Students will need to reference their notes on this section of the text during these assessments, so be sure they hold on to their notes.

- Collect students’ Animal Defenses research journals at the end of the lesson for formative assessment. In future lessons, students will continue working with the same note-catchers introduced in Lessons 2–4. Review students’ work on the note-catchers to identify any areas that students may need clarification or further explanation.

- Review: Back-to-Back, Face-to-Face protocol, Fist to Five in Checking for Understanding techniques (see Appendix).

- Post: Learning targets.
## A Closer Read for Main Ideas:
What Is Important about Animal Defenses?

<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>paraphrase, main idea, supporting details; habitat, sluggish, inflate</td>
<td>• Venom (book for teacher read-aloud, pages 26–27)</td>
</tr>
<tr>
<td></td>
<td>• Document camera</td>
</tr>
<tr>
<td></td>
<td>• Animal Defenses Research Journals (from Lesson 1)</td>
</tr>
<tr>
<td></td>
<td>• Listening Closely note-catcher (page 4 of Animal Defenses research journal; one per student and one to display)</td>
</tr>
<tr>
<td></td>
<td>• Listening Closely note-catcher (completed, for teacher reference)</td>
</tr>
<tr>
<td></td>
<td>• Equity sticks</td>
</tr>
<tr>
<td></td>
<td>• “Award-Winning Survival Skills” (from Lesson 2; one per student and one to display)</td>
</tr>
<tr>
<td></td>
<td>• Vocabulary Strategies anchor chart (from Lesson 3)</td>
</tr>
<tr>
<td></td>
<td>• Animal Defense Mechanisms glossary (pages 26–28 Animal Defenses research journal)</td>
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<tr>
<td></td>
<td>• Animal Defense Mechanisms Word Wall (from Lesson 3)</td>
</tr>
<tr>
<td></td>
<td>• Determining the Main Idea note-catcher (pages 5 and 6 of Animal Defenses research journal; one per student and one to display)</td>
</tr>
<tr>
<td></td>
<td>• Sticky note (one for modeling)</td>
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<tr>
<td></td>
<td>• Determining the Main Idea note-catcher (completed, for teacher reference)</td>
</tr>
<tr>
<td></td>
<td>• Examining Visuals note-catcher (page 2 of Animal Defenses research journal; from Lesson 2; one per student and one to display)</td>
</tr>
<tr>
<td></td>
<td>• KWL Chart: Animal Defense Mechanisms (page 1 of Animal Defenses research journal; from Lesson 1; one per student and one to display)</td>
</tr>
</tbody>
</table>
**A. Reviewing Learning Targets (5 minutes)**
- Gather students for a round of Back-to-Back, Face-to-Face. Once students are back-to-back with a partner, read the first learning target and ask:
  * “What does this learning target mean?”
- Call on a few pairs to share their explanations. Clarify the meaning of each target as needed.
- Repeat this for the second and third learning targets.

**Meeting Students’ Needs**
- Use of protocols like Back-to-Back, Face-to-Face allows for total participation of students. It encourages critical thinking, collaboration, and social construction of knowledge. It also helps students practice their speaking and listening skills.

**B. Engaging the Reader: Read-aloud of Venom (10 minutes)**
- Display the cover of Venom so all students can see. Open to pages 10 and 11 and ask:
  - “What did we learn about animal defense mechanisms when we read aloud Venom yesterday?”
- Listen for responses like: “Bees and wasps use venom to protect themselves and their hives.” Validate responses and explain to students that they will be listening to another section of Venom today.
- Using a document camera, display a blank Listening Closely note-catcher (page 4 Animal Defenses research journal). Invite students to open to page 4 in their Animal Defenses research journals to view their note-catchers. Remind them that they will be using this note-catcher to record information heard during the read-aloud.
- Use equity sticks to call on students. Review how to use the note-catcher by asking:
  - “What kind of information do we record in each part of this note-catcher?” Listen for responses like: “How ants protect themselves in the first column, and explain how that helps the ant survive in the second column, and we record other facts about ants in the box below. Then we write a gist statement at the bottom.”
- Explain to students that they will listen to a new part of Venom read aloud several times. Remind them that the first time they hear it, they should simply listen to what is being read. The second time they hear it read, they should begin to fill in the table.
- Read aloud pages 26 and 27.
- Invite students to turn and talk with a neighbor, sharing one interesting thing they heard during the read-aloud. Use equity sticks to call on two students to share what their partners found interesting.
### Opening (continued)

- Tell students that they will now hear pages 26 and 27 read aloud a second time. They should now record notes in the note-catcher as you read aloud.
- Read aloud pages 26 and 27 in Venom, stopping briefly after each paragraph. If necessary during each short pause, remind students to fill in notes on their note-catchers.
- Ask students to Think-Pair-Share about each of the following questions:
  * “What is an example of how ants protect themselves?” Listen for responses like: “Some ants sting or spray their enemies.”
  * “How do those defense mechanisms help ants survive?” Listen for responses like: “Fire ants stings cause their enemies to itch, which lets the ant get away.”
- Ask students to paraphrase orally with a partner, then record a gist statement.
- Give students a few minutes to work, then use equity sticks to call on pairs to share their gist statements. Listen for responses like: “This section talked about different kinds of ants, but mostly it was about fire ants. It talked about how these ants protect themselves by stinging, biting, and spraying their enemies.”
### Work Time

<table>
<thead>
<tr>
<th>A. Determining Main Ideas and Supporting Details: Guided Practice (15 minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Invite students to take out their “Award-Winning Survival Skills” article. Display a copy so all students can see.</td>
</tr>
<tr>
<td>- Ask students to join their reading partner. Review the homework from the previous lesson: “In the text ‘Award-Winning Survival Skills,’ reread the section ‘Best Action Hero: The spiny pufferfish.’ Use the vocabulary strategies to determine the meaning of the following words: habitat, sluggish, and inflates. Write what you think each word means and the strategy you used to find the meaning. Hint: Text features, root words, and inferring are strategies you can use to figure out the meaning of these words.”</td>
</tr>
<tr>
<td>- Ask students to share their definitions of words habitats, sluggish, and inflate and how they determined the meanings of these words with their partner.</td>
</tr>
<tr>
<td>- Use equity sticks to call on pairs to share. As necessary, demonstrate how to determine the meaning of each word: “Coral-reef habitats’ suggests that the word habitat is a place, like a coral reef, where this animal lives. So I think habitat means where an animal lives. Sluggish sounds like the word slug and the suffix -ish means like, so I think ‘sluggish swimmer’ means it swims slow, like a slug. When I read the word inflate, I inferred that this word means get bigger, because right after the word, the text says, ‘three times its size.’”</td>
</tr>
<tr>
<td>- Ask students to find and record the word habitat in their glossaries and add this word to the Word Wall.</td>
</tr>
<tr>
<td>- Remind students that yesterday and for homework they focused on figuring out the meaning of challenging words, and that has prepared them to reread the text and figure out the main idea of the sections they focused on yesterday (the armadillo, mimic octopus, and pufferfish).</td>
</tr>
<tr>
<td>- Tell students that the main idea is what a text, or part of a text, is about overall. Explain that this is somewhat different than the gist of the text. Tell students that the gist is what readers think the text is mostly about after a first read. It does not have to be supported with evidence from the text.</td>
</tr>
<tr>
<td>- Explain that the main idea is different because it is supported with evidence from the text. Explain this evidence is made up of details from the text that support the main idea, these are called supporting details. Explain that readers determine the main idea through careful close reading and that they will have a chance to practice this today with Award-Winning Survival Skills.</td>
</tr>
<tr>
<td>- Tell students that when a reader is trying to figure out the main idea, one strategy they can use is to read the text paragraph by paragraph, and ask themselves the same question after each paragraph: “What is this text about?” and as they read they revise their answer to this question.</td>
</tr>
</tbody>
</table>

### Meeting Students’ Needs

- The teacher may offer selected shorter passages to specific groups based on the readiness and needs of the group. This provides an opportunity for students to read a complex text within the fourth-grade level span, but differentiates the length of the text, not the complexity.
- Graphic organizers and recording forms provide the necessary scaffolding that is especially critical for learners with lower levels of language proficiency and/or learning and engage students more actively. For students needing additional support, provide a partially filled-in graphic organizer.
- Provide ELLs with a sentence starter or frame to aid in language production. For example: *This section is mostly about …*
### Work Time (continued)

- Display the text “Award-Winning Survival Skills.” Show the first section that was assigned for homework in Lesson 3, “Best Action Hero: The spiny pufferfish” and a blank copy of the Determining the Main Idea note-catcher (pages 5 and 6 of Animal Defenses research journal). Ask students to get out their copy of the note-catcher.

- Model with a think-aloud: “For example, the section of the text you read for homework is titled ‘Best Action Hero: The spiny pufferfish.’ If I asked myself the question, ‘What is this section about?’ my first thought would be that the main idea is going to have something to do with the pufferfish. Let me read the first paragraph, then check my thinking about the main idea.”

- Ask students to read along silently as you read aloud the first paragraph of the section titled “Best Action Hero: The spiny pufferfish.”

- Continue to think aloud: “Okay, so after reading this paragraph, I am thinking the main idea is that the pufferfish gets really big when something tries to eat it, because the text says ‘the puffer inflates to three times its normal size.’ Now I will check my thinking by reading the last paragraph of this section.”

- Write a first draft of the main idea on a sticky note and place it next to the text where students can see it: The main idea is that the pufferfish puffs up to three times its size.

- Ask students to read along silently as you read the last paragraph of the section. Then say: “Let’s check my main idea and if it needs any revision.” Read your main idea and ask: “How should I revise my main idea?”

- Give students a few minutes to discuss the question with a partner.

- Then use equity sticks to hear students’ revision ideas. Listen for main ideas similar to the following: “The pufferfish inflates to defend itself from predators” (see completed version of the Determining the Main Idea note-catcher in the supporting materials). Ask students to record this main idea into their note-catchers as well.

- Next, ask students to help you locate two to three details from the text that support this main idea and record these into the right-hand column next to the main idea for this section of the text. Listen for details such as: “It swallows water until it is completely full,” or “sharks have died from a pufferfish inflating in their esophagus.”
### B. Determining Main Ideas and Supporting Details: Partner Practice (20 minutes)

- Tell students that they will now reread two more sections of the text to determine the main idea and supporting details with their partner. Point out the sections indicated on the Determining the Main Idea note-catcher “Best Special Effect: The three-banded armadillo” and “Best Impersonator: The mimic octopus.”

- Give students 15 minutes to reread these sections of the text and determine the main idea and two to three supporting details for each.

- Circulate and observe students. If you notice a significant portion of your students struggling during this partner work, have your students stop partner work after reading and determining the main idea and supporting details for the first section. Then review their answers as a class and have them make any necessary revisions to their notes. At this point you could release them to continue partner work again or provide additional guided practice and work through the second section as a whole class.

- After students have finished reading and determining main idea and supporting details for these sections of the text, use equity sticks to have pairs share their work. Clarify as needed and allow students to revise their notes. Use the completed version of the Determining the Main Idea note-catcher to guide your work with students.

### C. Confirming Inferences from Visuals (5 minutes)

- Congratulate students on their close reading of the selected sections of the text. Tell them that you would now like to look back at their Examining Visuals note-catchers (page 3 of Animal Defenses research journal) and display your own copy as well.

- Tell students that at this point they should be able to fill in the third column of this note-catcher. Review the note-catcher, and ask students to read what they inferred about the three-banded armadillo, the mimic octopus, and the pufferfish.

- Ask students to work independently and use details in the text to confirm as correct or incorrect what they inferred from the visuals of these animals in the text and record this information on their note-catchers.

- Quickly model what this might look like with the pufferfish. For example: “When I looked at the pufferfish, I inferred that it just used its spike to protect itself. I did not know that it could puff up to three times its normal size.” Then record these notes on the displayed copy of the note-catcher.

- Collect students’ Animal Defenses Research Journals after the closing of this lesson to check their Examining Visuals note-catcher as an exit ticket.

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### Meeting Students’ Needs

- For students who struggle, consider providing additional guided practice determining the main idea and supporting details in the text. This can be done in small teacher-led groups using other sections of “Award-Winning Survival Skills” during your class’s guided and independent reading time.

- This exit ticket acts as an independent comprehension check. If students are still struggling with comprehending the text, they will have difficulty with this task. Use this information to help determine which students may need more support with this text during your guided and independent reading.
A. Animal Defense Mechanisms: KWL Chart (5 minutes)
- Invite students to turn to the Animal Defense Mechanisms: KWL chart (page 1 of Animal Defenses research journal).
  Remind students that researchers always reflect on and record what they’ve learned.
- Invite students to Think-Pair-Share. Ask:
  * “Were any of your questions answered after reading ‘Award-Winning Survival Skills’?”
  * “What new information did you learn from this article?”
- Tell students to write the answers to any questions they had in the W column in the “I Learned” column, in the “Information” section. Include the name of the article in the “Source” column.
- Ask students to also write one new piece of information they learned from the article in the “I Learned” column.
- Collect students’ Animal Defenses Research Journals to check their Examining Visuals note-catcher completed in Work Time C as an exit ticket.

Homework
- Continue your independent reading.
Source: *Venom* pages 26–27

Directions: Listen as *Venom* is read aloud. Use the table below to record your notes.

<table>
<thead>
<tr>
<th>Examples of How Ants Protect Themselves</th>
<th>How This Helps Ants Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Venom</em> pages 26–27</td>
<td></td>
</tr>
<tr>
<td>• some species use their rear ends to sting or spray</td>
<td>• fire ant stings cause itchy, burning blisters</td>
</tr>
<tr>
<td>• fire ants use venom to kill animals for food</td>
<td>• fire ant stings aren’t usually deadly</td>
</tr>
<tr>
<td>• fire ants sting with their rear ends when threatened by an enemy</td>
<td></td>
</tr>
<tr>
<td>Other Facts about Ants</td>
<td></td>
</tr>
<tr>
<td>• Ants are social</td>
<td></td>
</tr>
<tr>
<td>• Female worker ants are wingless</td>
<td></td>
</tr>
<tr>
<td>• Males and young queens have wings</td>
<td></td>
</tr>
</tbody>
</table>

Explain in your own words what this section of *Venom* was about:

This section talked about different kinds of ants, but mostly it was about fire ants. It talked about how these ants protect themselves by stinging, biting, and spraying their enemies.
### Animal Defenses Research Journal:
**Determining Main Ideas**
(Completed, for Teacher Reference)

**Source:** “Award-Winning Survival Skills”

#### Best Action Hero—The spiny pufferfish

<table>
<thead>
<tr>
<th><strong>Main Idea:</strong></th>
<th><strong>Supporting Details:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The pufferfish inflates to defend itself from predators.</td>
<td>• “swallows water until its stomach is completely full”&lt;br&gt;• “skin and stomach are super-stretchable”&lt;br&gt;• has no rib cage&lt;br&gt;• “sharks have actually died from a pufferfish inflating in their esophagus”</td>
</tr>
</tbody>
</table>

#### Best Special Effect—The three-banded armadillo

<table>
<thead>
<tr>
<th><strong>Main Idea:</strong></th>
<th><strong>Supporting Details:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-banded armadillos curl into completely enclosed balls to protect themselves from predators.</td>
<td>• Armadillos have “leathery, armored shells”&lt;br&gt;• They have body shields made of “bony plates”&lt;br&gt;• They have “three hinged bands that give them the flexibility to roll themselves up”&lt;br&gt;• “there’s plenty of room inside to fit a head, legs, and tail”&lt;br&gt;• “when threatened, armadillos curl up and leave only a tiny peephole from which to peer out at their predator”&lt;br&gt;• “if touched, they snap totally shut”</td>
</tr>
</tbody>
</table>
**Source:** “Award-Winning Survival Skills”

### Best Impersonator—The mimic octopus

<table>
<thead>
<tr>
<th><strong>Main Idea:</strong> The mimic octopus protects itself by mimicking other animals.</th>
<th><strong>Supporting Details:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• “the mimic octopus contorts its body and dresses in bright stripes to impersonate the poisonous lionfish” (diagram)</td>
<td>• “this octopus is the only animal we’ve found so far that can mimic more than one animal”</td>
</tr>
<tr>
<td>• “this octopus is the only animal we’ve found so far that can mimic more than one animal”</td>
<td>• the octopus mimics at least three animals—“the flatfish, lionfish, and sea snake”</td>
</tr>
<tr>
<td>• the octopus mimics at least three animals—“the flatfish, lionfish, and sea snake”</td>
<td>• many octopuses live and hide in reefs or rocks, but the mimic octopus slinks along the seafloor in plain sight so it doesn’t have anywhere to hide</td>
</tr>
<tr>
<td>• many octopuses live and hide in reefs or rocks, but the mimic octopus slinks along the seafloor in plain sight so it doesn’t have anywhere to hide</td>
<td>• it has a flexible body and skin cells that have colored pigments that can lighten or darken to change its color</td>
</tr>
</tbody>
</table>
Grade 4: Module 2B: Unit 1: Lesson 5
Reading Scientific Text: Building Expertise on Animal Defense Mechanisms
Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can paraphrase portions of a text that is read aloud to me. (SL.4.2)
I can interpret information presented through charts or graphs. I can explain how that information helps me understand the text around it. (RI.4.7)
I can determine the main idea using specific details from the text. (RI.4.2)

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can paraphrase information presented in a read-aloud on animal defense mechanisms.</td>
<td>• Listening Closely note-catcher (page 7 of Animal Defenses research journal)</td>
</tr>
<tr>
<td>• I can make inferences about animal defense mechanisms by examining articles that include text and visuals.</td>
<td>• Examining Visuals note-catcher (page 8 of Animal Defenses research journal)</td>
</tr>
<tr>
<td>• I can determine the main idea of a section of Animal Behaviors: Animal Defenses.</td>
<td>• Determining Main Ideas note-catcher (pages 9 and 10 of Animal Defenses research journal)</td>
</tr>
<tr>
<td></td>
<td>• Observation of participation during Jigsaw</td>
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</tbody>
</table>
**Agenda**

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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>1. Opening</td>
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<tr>
<td></td>
<td>A. Engaging the Reader: Read-aloud of <em>Venom</em> (10 minutes)</td>
</tr>
<tr>
<td></td>
<td>B. Reviewing Learning Targets (5 minutes)</td>
</tr>
<tr>
<td>2. Work Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Examining Visuals (20 minutes)</td>
</tr>
<tr>
<td></td>
<td>B. Rereading an Informational Text: Determining the Main Idea (20 minutes)</td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C. Animal Defense Mechanisms: KWL Chart (5 minutes)</td>
</tr>
<tr>
<td>4. Homework</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Continue your independent reading.</td>
</tr>
</tbody>
</table>

**Teaching Notes**

- During the Opening of this lesson, students listen and take notes as a section in *Venom* titled, “A Meal to Remember,” is read aloud. Note that in Unit 2 students will reread this excerpt as a part of their mid and end of unit assessment. Students will need to reference their notes on this section of the text during these assessments, so be sure they keep their notes.

- Students begin the same process used in Lessons 2–4 to closely read a section of the central text *Animal Behavior: Animal Defenses*. They examine a visual and think about how it helps them better understand the text, then read and reread the same section for the main idea and supporting details. This process continues into Lesson 6.

- Students will use the Jigsaw protocol to read the predetermined sections in *Animal Behavior: Animal Defenses*. In Lesson 5, they work with their expert groups to closely examine a visual and determine the main idea of their section. In Lesson 6, they will continue working in these groups to identify details that support that main idea, and then will meet with students who read different sections of the text to share the main idea and supporting details.

- The four sections from *Animal Behavior: Animal Defenses* that students work with in Lessons 5 and 6 were chosen based on the overall structure of the book. By reading these specific sections, students will get a general overview of what animal defense mechanisms are as well as an introduction to several types of defense mechanisms (chemical defenses and warning colors, venom, and mimicry).

- Since one section is about venom, which has been discussed in previous lessons, consider assigning this section to students who are struggling. The background knowledge they have built in Lessons 1–4 will support them in tackling this text.

- In advance: Determine expert groups for Jigsaw protocol (three groups total).

- Review: Jigsaw protocol (see Appendix).

- Post: Learning targets.
**Lesson Vocabulary**

determine, camouflage, mimicry

**Materials**

- *Venom* (book for teacher read-aloud, pages 74–75)
- Document camera
- Animal Defenses Research Journal (from Lesson 1)
- Listening Closely note-catcher (page 7 of Animal Defenses research journal; one per student and one to display)
- Listening Closely note-catcher (completed, for teacher reference)
- Equity sticks
- *Animal Behavior: Animal Defenses* (book; one per student and one to display)
  - Teacher model—“Avoiding Danger” (pages 7–9, stopping at “Self-Defense”; last 2 paragraphs on page 21; “Escape Artists” first two paragraphs on page 22)
  - Group 1—“Bad Smells, Bad Tastes, and Powerful Poisons” (page 55–top of 56, stopping at “Poisonous Prey”; pages 58–60)
  - Group 2—“Venomous Stings and Bites” (page 83; “How Venom Works” box on page 86; “Stinging Tentacles” pages 77–78)
  - Group 3—“Mimicry” (pages 91–94)
- Examining Visuals note-catcher (page 8 of Animal Defenses research journal; one per student and one to display)
- Examining Visuals note-catcher (completed, for teacher reference)
- Sticky notes
- Determining the Main Idea note-catcher (pages 9 and 10 of Animal Defenses research journal; one per student and one to display)
- Determining the Main Idea note-catcher (completed, for teacher reference)
- Animal Defense Mechanisms: KWL Chart (page 1 of Animal Defenses research journal; from Lesson 1; one per student and one to display)
## Opening

### A. Engaging the Reader: Read-aloud of *Venom* (10 minutes)

- Display the cover of *Venom* so all students can see. Open to pages 26 and 27 and ask:
  - *“What did we learn about animal defense mechanisms when we read aloud *Venom* a few days ago?”*
- Listen for responses like: “Fire ants sting their enemies to defend themselves.” Validate responses and explain to students that they will be listening to another section of *Venom* today.
- Using a [document camera](https://en.wikipedia.org/wiki/Document_camera), display blank [Listening Closely note-catcher](https://en.wikipedia.org/wiki/Note-catcher) and invite students to open to the next one on page 7 in their [Animal Defenses](https://en.wikipedia.org/wiki/Animal_defenses) research journals. Remind students that they have been using this note-catcher to record information heard during a read-aloud.
- **Use** [equity sticks](https://en.wikipedia.org/wiki/Equity_sticks) to call on students. Review how to use the note-catcher by asking:
  - *“What kind of information do we record in each part of this note-catcher?”*
- Listen for responses like: “We record facts about ants in the first column, how ants protect themselves in the middle column, and explain how that helps the ant survive in the right-hand column. We write a gist statement at the bottom.”
- Remind students that they will listen to a new part of *Venom* read aloud several times. Remind them that the first time they hear it, they should simply listen to what is being read. The second time they hear it read, they should begin to fill in the table.
- Read aloud the section “A Meal to Remember—If You Live That Long” on pages 74 and 75. Do not read the other sections: “Danger Down Below” or “And Now for Something Completely Different.”
- Invite students to turn and talk with a neighbor, sharing one interesting thing they heard during the read-aloud. Use equity sticks to call on two students to share what their partners found interesting.
- Tell students that they will now hear pages 74 and 75 read aloud a second time and should now record notes in the note-catcher.
- Read aloud pages 74 and 75 in *Venom*, stopping briefly after each paragraph. If necessary during each short pause, remind students to fill in notes on their note-catchers.
- Invite students to turn and talk with a partner. Ask:
  - *“What is an example of how pufferfish protect themselves?”*
# Opening (continued)

- Listen for responses like: “They inflate themselves so they are too large to swallow.”
- Ask:
  - “What was the gist of this section?”
- Listen for responses like: “This section was mostly about how pufferfish protect themselves by inflating or by their poison.”
- Point to the question below the table on the graphic organizer—“Explain in your own words what this section of *Venom* was about?” Tell students to jot down the gist of this part of the text on these lines. If necessary, prompt students by asking: “What was this part of the text mostly about?”
- Remind students they will have many more opportunities to read this book, and can read through it on their own during independent reading or in their free time during the school day if they wish.

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussing and clarifying the language of learning targets helps build academic vocabulary.</td>
</tr>
</tbody>
</table>

## B. Reviewing Learning Targets (5 minutes)

- Use equity sticks to call on a student to read the remaining learning targets:
  - “I can paraphrase information presented in a read-aloud on animal defense mechanisms.”
  - “I can make inferences about animal defense mechanisms by examining articles that include text and visuals.”
  - “I can determine the main idea of a section of *Animal Behaviors: Animal Defenses*.”
- Tell students that they will begin reading a new text about animal defense mechanisms. Build up the excitement!

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussing and clarifying the language of learning targets helps build academic vocabulary.</td>
</tr>
</tbody>
</table>
### Work Time

#### A. Examining Visuals (20 minutes)

- Distribute copies of *Animal Behavior: Animal Defenses*. Invite students to flip through the book and Think-Pair-Share, discussing what they notice and wonder about the book.

- Use equity sticks to call on students to share their observations and questions. Listen for students sharing observations about the parts of the book like the table of contents, glossary, and index and point out these parts if students do not share them on their own. Only answer clarifying questions for now; for other questions, respond with something like: “You’ll find that out as you read this book and work with it more closely throughout this module.”

- Preview Lessons 5 and 6: Tell students that they are going to go through the same process they just went through in reading “Award-Winning Survival Skills” to closely read and reread sections of this book in order to learn more about animal defense mechanisms. Explain that they will begin by examining visuals and reading sections for the gist, and then reread for the main idea and supporting details. They will work in expert groups to read specific sections and then, in the next lesson, share what they have learned from that section in Jigsaw groups.

- Tell students that today, they will start by examining a visual in a section of the book using the Examining Visuals note-catcher (page 8 of their research journals) to record information and inferences about the visual their group is examining closely. Remind students that they did this in Lesson 2. Display a copy of the note-catcher and invite students to turn to the Examining Visuals note-catcher on page 8 of their research journals.

- Briefly review Steps 1–3 and the first two columns on the note-catcher. Clarify that students will complete only the first two columns prior to reading their section of text. Review Steps 4 and 5 and the heading of the last column (“Details in the Text That Support My Inferences”). Clarify that students will read their section of the text and then complete the last column.

- Explain to students that before they break into groups to do this, they will practice while looking at a visual in the text together.

- Invite students to turn to page 8 in the book and examine the photograph and caption, thinking about what details they notice. Use equity sticks to call on three to four students to share their observations. Listen for things like: “I noticed that this is also a photograph of a springbok,” or “The springbok bounces into the air with stiff legs to show predators they are hard to catch.” Add students’ observations to the “Details from the Visual” column. Tell students not to write anything on their graphic organizers.

- Point to Step 3 on the graphic organizer and explain to students that now they will use the details they observed in the visual and their background knowledge to make inferences about the springbok.

### Meeting Students’ Needs

- The teacher may offer selected shorter passages to specific groups based on the readiness and needs of the group. This provides an opportunity for students to read a complex text within the fourth-grade level span, but differentiates the length of the text, not the complexity.

- Graphic organizers and recording forms engage students more actively and provide the necessary scaffolding that is especially critical for learners with lower levels of language proficiency and/or learning. For students needing additional support, provide a partially filled-in graphic organizer.

- Provide ELLs with a sentence starter or frame to aid in language production. For example: *In the visual I see ...*

- Some students may benefit from having key sections pre-highlighted in their texts. This will help them focus on small sections rather than scanning the whole text for answers.
### Work Time (continued)

- Invite students to Think-Pair-Share. Ask:
  - “What do you infer about the springbok? What details from the visual did you base your inference on?”
- Once students have had time to discuss their inferences, use equity sticks to call on students to share an inference. Tell students to use the sentence frame: “We infer _______ because the visual/caption shows/says _______.” Record what students share in the “My Inferences” column on the graphic organizer.
- If necessary, model briefly. Say something like: “I infer that the springbok’s jumping shows it’s hard to catch because the predator can see its muscles and see how quick it is. I infer this because the visual shows the springbok’s leg muscles and the caption says ‘hard to catch,’ which means they must be fast.” [Write inference in the “My Inferences” column.]
- Point to the note on the graphic organizer and remind students that they will not be filling in the right-hand column yet. Explain that now they will listen to the text read aloud, listening for details that support their inferences.
- Read aloud pages 7–9, the last two paragraphs on page 21, and the first two paragraphs on page 22. Invite students to follow along in their copies of the text as you read, placing a sticky note in the text by details that support their inferences.
- After reading, ask:
  - “What details support our inferences about the springbok?”
- Listen for responses like: “On page 8 it says, ‘Their odd jumping behavior, called stotting, signals to the cheetah, ‘We have seen you, so do not bother to chase us—we are strong and healthy and can outrun you.’” Model writing details on the note-catcher, including the page number after each detail.
- Tell students that now they will do this in small groups. Break students into three groups. Tell students to circle their group page assignments on the note-catcher for Steps 1 and 4.
- Ask students to review what it looks like and sounds like when working in a small group of peers. Listen for responses like: “Wait my turn to speak, so I am heard; don’t shout/speak too loudly; make sure everyone gets a turn to speak; no one person does most/all of the speaking; use information from text to support my ideas.”
- Prompt students through the steps by inviting them to turn to the visual for their group (the assigned page in Step 1—group 1 turns to page 59, group 2 turns to page 78, and group 3 turns to page 92).
**Work Time (continued)**

- Tell students to independently examine the photograph and caption, thinking about what details they notice and writing them in the “Details from the Visual” column on their note-catcher. After several minutes, invite students to share what they wrote in that column with their partners. Listen for students following class norms when working in a group and identifying explicit details from the picture when sharing their notes. Support students who rated themselves with a fist, one finger, or two fingers during the Fist-to-Five for this target in Lesson 2.

- After several minutes, point to Step 3 on the graphic organizer and remind students that now they will use the details they observed in the visual and their background knowledge to make inferences about the animal in their group’s visual.

- Invite students to think to themselves for a minute before sharing with their group. Ask:
  
  * “What do you infer about the animal in your visual? What details from the visual did you base your inference on?”

- Once students have had some time to discuss their inferences, invite students to write their inferences on their note-catchers. Tell students to use the sentence frame: “We infer _______ because the visual/caption shows/says _______.

  Circulate and support students as necessary, paying special attention to students who rated themselves with a fist, one finger, or two fingers during the Fist-to-Five for this target in Lesson 2.

- Remind students that they will be filling in the right-hand column after reading their section of the text.

- Tell students that the text is challenging and may have many unfamiliar words. Reassure them that just like when they read “Award-Winning Survival Skills,” they are not expected to understand it fully the first time they read it. Remind them that one key to being a strong reader of difficult text is being willing to struggle.

- Remind them that when readers read a text, they use many strategies to make sense of what is being read. Ask:
  
  * “What strategies do readers use to make sense of a text?”

- Listen for responses like: “Readers infer,” or “Readers pay attention to what they understand and what they don’t.” Validate responses and write this question on the board:
  
  * “When you read this text for the first time, what made sense? What didn’t?”

- Tell students to jot down their notes about what made sense on a **sticky note** and what is confusing on another sticky note.

- Give students 6–8 minutes to read their section of the text independently. Circulate to support as needed. Probe by asking: “What’s making sense? What is confusing?” and encourage them to persist. Support students who rated themselves with a fist, one finger, or two fingers during the Fist-to-Five for this target in Lesson 2.

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**Meeting Students’ Needs**

- **Tell students to independently examine the photograph and caption, thinking about what details they notice and writing them in the “Details from the Visual” column on their note-catcher.** After several minutes, invite students to share what they wrote in that column with their partners. Listen for students following class norms when working in a group and identifying explicit details from the picture when sharing their notes. Support students who rated themselves with a fist, one finger, or two fingers during the Fist-to-Five for this target in Lesson 2.

- After several minutes, point to Step 3 on the graphic organizer and remind students that now they will use the details they observed in the visual and their background knowledge to make inferences about the animal in their group’s visual.

- Invite students to think to themselves for a minute before sharing with their group. Ask:
  
  * “What do you infer about the animal in your visual? What details from the visual did you base your inference on?”

- Once students have had some time to discuss their inferences, invite students to write their inferences on their note-catchers. Tell students to use the sentence frame: “We infer _______ because the visual/caption shows/says _______.

  Circulate and support students as necessary, paying special attention to students who rated themselves with a fist, one finger, or two fingers during the Fist-to-Five for this target in Lesson 2.

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- Tell students to jot down their notes about what made sense on a **sticky note** and what is confusing on another sticky note.

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## Work Time (continued)

<table>
<thead>
<tr>
<th></th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>After 6–8 minutes, invite students to share initial thinking in their small groups:</td>
</tr>
<tr>
<td></td>
<td>“What makes sense? What is confusing?”</td>
</tr>
<tr>
<td></td>
<td>Then ask them to reread their section of the text together, looking for details that support their inferences about the visual examined earlier. Ask students to record these details in the right-hand column of their note-catchers, including the page number where they found that detail. Circulate to support as needed. Probe by asking: “What details support your inferences about the visual?” or “How does that detail support your inference?” Support students who rated themselves with a fist, one finger, or two fingers during the Fist-to-Five for this target in Lesson 2.</td>
</tr>
<tr>
<td></td>
<td>Use the Fist-to-Five Checking for Understanding technique to have students briefly reflect on the learning target: “I can make inferences about animal defense mechanisms by examining an article that includes text and visuals,” with a fist being “I am not confident that I can meet this target on my own” and a five being “I can make inferences about articles that include texts and visuals on my own.” Note students who show a fist, one, or two fingers to provide further support in future lessons.</td>
</tr>
</tbody>
</table>
### Work Time (continued)

**B. Rereading an Informational Text: Determining the Main Idea (20 minutes)**

- Tell students they will now reread their section of *Animal Behavior: Animal Defenses* a second time to determine the main idea of their section. Invite students to open to pages 9 and 10 in their research journals, to the **Determining the Main Idea note-catcher**.

- Explain that students will continue to work with their expert groups and determine the main idea of their section and that in the next lesson, they will reread to identify details that support the main idea of their section. Ask:
  
  * “How do we determine the main idea of a section of text?”

- Listen for students describing the process introduced in Lesson 3, saying things like: “We read the text paragraph by paragraph, and after each paragraph ask ourselves, ‘What is this text about?’ We revise our thinking about the main idea as we read.”

- Tell students they will then write the main idea in the box for their section only. Explain that they should leave the other sections blank for now, and the “Supporting Details” boxes blank for now as well.

- Review determining the main idea of “Avoiding Danger” (pages 7–9, the last two paragraphs on page 21, and the first two paragraphs on page 22) and going through the process just discussed. Have students turn and talk after each paragraph before discussing the main idea or revised thinking with the whole group. Model recording the main idea in the appropriate box on the Determining the Main Idea note-catcher and ask students to do the same.

- Review working in a small group by asking:
  
  * “What does it look like or sound like when working in a small group with your peers?”

- Listen for responses like: “Wait my turn to speak, so I am heard; don’t shout/speak too loudly; make sure everyone gets a turn to speak; no one person does most/all of the speaking; use information from text to support my ideas.”

- Give students 15 minutes to work through the steps with their partners to determine the main idea of their section. Circulate and support as needed. Listen for students using the steps to determine the main idea of the text and following class norms when working in a small group. Probe by asking: “What was this section mostly about?” or “How does everything fit together into the one most important idea?”

- After 15 minutes, invite students to show a thumbs-up if they were able to determine the main idea of their section and a thumbs-down if they were not. Praise students showing a thumbs-up. Be sure to check in with students who gave a thumbs-down during the group work in Lesson 6.

### Meeting Students’ Needs

- The teacher may offer selected shorter passages to specific groups based on the readiness and needs of the group. This provides an opportunity for students to read a complex text within the fourth-grade level span, but differentiates the length of the text, not the complexity.

- Graphic organizers and recording forms engage students more actively and provide the necessary scaffolding that is especially critical for learners with lower levels of language proficiency and/or learning. For students needing additional support, provide a partially filled-in graphic organizer.

- Provide ELLs with a sentence starter or frame to aid in language production. For example: *I think this text is about ...*

- Some students may benefit from having key sections pre-highlighted in their texts. This will help them focus on small sections rather than scanning the whole text for answers.
### Closing and Assessment

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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</thead>
</table>

#### A. Animal Defense Mechanisms: KWL Chart (5 minutes)

- Invite students to turn to the **Animal Defense Mechanisms: KWL chart** in their research journals. Remind students that researchers always reflect on and record what they’ve learned.

- Invite students to Think-Pair-Share. Ask:
  - “Were any of your questions answered in the text that you read today?”
  - “What new information did you learn from your section of the text?”

- Tell students to write the answers to any questions they had in the W column in the “I Learned” column, in the “Information” section. Include the name of the book and page number in the “Source” column.

- Encourage students to also write one new piece of information they learned from the book in the “I Learned” column.

### Homework

- Continue your independent reading.
Grade 4: Module 2B: Unit 1: Lesson 5
Supporting Materials
**Source:** *Venom* pages 74–75

**Directions:** Listen as *Venom* is read aloud. Use the table below to record your notes.

<table>
<thead>
<tr>
<th>Examples of How Pufferfish Protect Themselves</th>
<th>How This Helps Pufferfish Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Venom</em> pages 74–75</td>
<td></td>
</tr>
<tr>
<td>• Inflates itself</td>
<td>• Becomes too large for an enemy to swallow</td>
</tr>
<tr>
<td>• Prickly</td>
<td>• The prickly skin can hurt the pufferfish’s enemy</td>
</tr>
<tr>
<td>• Toxic: The fish’s skin, blood, and organs contain tetrodotoxin</td>
<td>• The poison kills its enemy</td>
</tr>
<tr>
<td>• Each fish has enough of the stuff to kill thirty people or a dozen elephants</td>
<td></td>
</tr>
</tbody>
</table>

Other Facts about Pufferfish

• Humans eat the pufferfish
• Special licensed chefs are the only people allowed to prepare it to eat
• Their poison is being used as a non-addictive painkiller for patients with cancer and other illnesses

**Explain in your own words what this section of *Venom* was about:**

This section of *Venom* was about the pufferfish. Its defense mechanisms are that it can inflate itself and that it is poisonous.
Source: Animal Behaviors: Animal Defenses

1. Look at the visual in your group’s section of Animal Behaviors: Animal Defenses.
   - Group 1—page 59
   - Group 2—page 88
   - Group 3—page 92

2. In the first column of the graphic organizer below, record three details you see in the visual.

3. In the second column of the graphic organizer, record the inferences you make based on these details.

**NOTE: Do NOT complete the right-hand column of the graphic organizer yet!

1. Read your group’s assigned pages.
   - Group 1—“Bad Smells, Bad Tastes, and Powerful Poisons” (page 55–top of 56, stopping at “Poisonous Prey”; pages 58–60)
   - Group 2—“Venomous Stings and Bites” (page 83; “How Venom Works” box on page 86; “Stinging Tentacles” pages 77–78)
   - Group 3—“Mimicry” (pages 91–94)

2. In the right-hand column of the graphic organizer, record details from your section of the text that support your inferences in the middle column.
Animal Defenses Research Journal:
Examining Visuals
(Completed, for Teacher Reference)

p. 59

<table>
<thead>
<tr>
<th>Details from the Visual (explicit information)</th>
<th>My Inferences (what I infer about this animal)</th>
<th>Details in the Text That Support My Inferences (confirmed with explicit information)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• cinnabar caterpillar on a leaf</td>
<td>• the colors are of this caterpillar are a defense mechanism because predators see the colors and know it’s poisonous, so they stay away</td>
<td>• “bright colors can also be warning colors” (page 58)</td>
</tr>
<tr>
<td>• orange and black stripes</td>
<td></td>
<td>• “many animals that are poisonous, bad tasting, or both are clad in warning colors. The colors say to predators, ‘Don’t even think of attacking me. You’ll be sorry.’” (page 58)</td>
</tr>
<tr>
<td>• hairs coming off of it</td>
<td></td>
<td>• “A predator that licks, mouths, or bites an animal with warning colors often drops or spits out its prey.” (page 58)</td>
</tr>
<tr>
<td>• foul-tasting and poisonous</td>
<td></td>
<td>• “the orange-and-black-striped caterpillars of the cinnabar moth are poisonous, too.” (page 59)</td>
</tr>
<tr>
<td>• colors keep predators away</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Animal Defenses Research Journal:  
Examining Visuals  
(Completed, for Teacher Reference)

<table>
<thead>
<tr>
<th>Details from the Visual (explicit information)</th>
<th>My Inferences (what I infer about this animal)</th>
<th>Details in the Text That Support My Inferences (confirmed with explicit information)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• blue sea wasp</td>
<td>• the sea wasp defends itself by stinging its enemies</td>
<td>• “A venomous animal has a sting, spines, or specialized teeth attached to venom-making glands” (page 83)</td>
</tr>
<tr>
<td>• four legs or tails</td>
<td></td>
<td>• “A group of ocean animals called cnidarians also use stings for predation and self-defense. This group includes corals, jellyfish, and anemones.” (page 87)</td>
</tr>
<tr>
<td>• a sting from it can kill a person in less than 5 minutes</td>
<td></td>
<td>• “The box jelly, also called a sea wasp, is among the most deadly ... its venom causes extreme pain” (page 87)</td>
</tr>
</tbody>
</table>
### Animal Defenses Research Journal:
Examining Visuals
(Completed, for Teacher Reference)

#### p. 92

<table>
<thead>
<tr>
<th>Details from the Visual (explicit information)</th>
<th>My Inferences (what I infer about this animal)</th>
<th>Details in the Text That Support My Inferences (confirmed with explicit information)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• pink flower</td>
<td>• the hover fly tricks its predators into thinking it’s a bumblebee so it doesn’t get eaten</td>
<td>• “to the toad, the insect’s color, sound, and behavior all warn ‘bumblebee.’” (page 91)</td>
</tr>
<tr>
<td>• black and yellow hover fly on flower</td>
<td></td>
<td>• “The hover fly looks just like a bumblebee” (page 91)</td>
</tr>
<tr>
<td>• clear wings</td>
<td></td>
<td>• “The hover fly is a mimic—an animal that looks like another kind of animal and benefits from this resemblance.” (page 91)</td>
</tr>
<tr>
<td>• hover fly looks just like a bumblebee</td>
<td></td>
<td>• “The hover fly gains protection from predators by looking like a bee” (page 91)</td>
</tr>
</tbody>
</table>
**Source:** Animal Behaviors: Animal Defenses

Reread the text and identify the main idea for each section of the text.

<table>
<thead>
<tr>
<th>Section</th>
<th>Main Idea</th>
<th>Supporting Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Avoiding Danger” pages 7–9, stopping at “Self-Defense”; last two paragraphs on page 21; and “Escape Artists” first two paragraphs on page 22</td>
<td>Animals use many behaviors to defend themselves from predators.</td>
<td>Supporting Details:</td>
</tr>
<tr>
<td>“Bad Smells, Bad Tastes, and Powerful Poisons” pages 55–56, stopping at “Poisonous Prey”; pages 58–60</td>
<td>Many animals that protect themselves with chemical defenses are brightly colored to warn predators to stay away.</td>
<td>Supporting Details:</td>
</tr>
<tr>
<td>“Venomous Stings and Bites” page 83; “How Venom Works” box on page 86; “Stinging Tentacles” pages 77–78</td>
<td>Some animals protect themselves by injecting venom into their enemy.</td>
<td>Supporting Details:</td>
</tr>
<tr>
<td>“Mimicry” pages 91–94</td>
<td>Some animals protect themselves by mimicking other animals.</td>
<td>Supporting Details:</td>
</tr>
</tbody>
</table>
Grade 4: Module 2B: Unit 1: Lesson 6
Reading Scientific Text: Reading Closely about Animal Defense Mechanisms
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

| I can determine the main idea using specific details from the text. (RL.4.2) |
| I can paraphrase portions of a text that are read aloud to me. (SL.4.2) |
| I can document what I learn about a topic by taking notes. (W.4.8) |

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can identify details that support the main idea of a section of <em>Animal Behaviors: Animal Defenses.</em></td>
<td>• Determining the Main Idea note-catcher (pages 9 and 10 in Animal Defenses research journal)</td>
</tr>
<tr>
<td>• I can paraphrase and take notes on information presented by my peers in Jigsaw groups.</td>
<td>• Observation of participation during Jigsaw</td>
</tr>
</tbody>
</table>

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### Agenda

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1. Opening</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Engaging the Reader: Quiz-Quiz-Trade (15 minutes)</td>
</tr>
<tr>
<td></td>
<td>B. Reviewing Learning Targets (5 minutes)</td>
</tr>
<tr>
<td>2. Work Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Rereading an Informational Text: Identifying Supporting Details (25 minutes)</td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Jigsaw Share and Debrief (15 minutes)</td>
</tr>
<tr>
<td>4. Homework</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Animal Behavior: Animal Defenses Vocabulary</td>
</tr>
</tbody>
</table>

### Teaching Notes

- This is the second lesson where students read sections from Animal Behavior: Animal Defenses. In the previous lesson, students worked in expert groups to examine a visual in their section of the anchor text and determine the main idea of that section. In this lesson, they will continue working in the same groups to identify details that support the main idea.

- Students will then regroup into Jigsaw triads, with one representative from each expert group in each Jigsaw triad. In triads, they will share the main idea of their section while their partners listen, paraphrase, and take notes on their Determining the Main Idea note-catchers. This provides additional practice in the long-term target “I can paraphrase portions of a text that is read aloud to me” (SL.4.2) as well as the long-term target “I can document what I learn about a topic by taking notes” (W.4.8).

- You may determine the triad groups in advance and strategically group students. One possible arrangement to consider would be to group ELLs who speak the same home language in the same group, allowing them to have more meaningful discussions and clarify points in their native language.

- In advance: Determine triad groups.

- Review: Jigsaw protocol, Quiz-Quiz-Trade, and Fist to Five in Checking for Understanding techniques (see Appendix).

- Post: Learning targets.
### Lesson Vocabulary
- support, alert (7), camouflage (21), self-defense, escape (22), chemical defense (55), irritate, substances (76), paralyze, mimic (91), imitating

### Materials
- Vocabulary word cards (for teacher use; see Teaching Notes)
- *Animal Behavior: Animal Defenses* (book; one per student and one to display)
  - Teacher model—“Avoiding Danger” (pages 7–9, stopping at “Self-Defense”); last two paragraphs on page 21; “Escape Artists” first two paragraphs on page 22
  - Group 1—“Bad Smells, Bad Tastes, and Powerful Poisons” (page 55–top of 56, stopping at “Poisonous Prey”; pages 58–60)
  - Group 2—“Venomous Stings and Bites” (page 73; “How Venom Works” box on page 76; “Stinging Tentacles” pages 77–78)
  - Group 3—“Mimicry” (pages 91–94)
- Animal Defenses Research Journal (from Lesson 1)
- Determining the Main Idea note-catcher (pages 9 and 10 of Animal Defenses research journal; one per student and one to display)
- Determining the Main Idea note-catcher (completed, for teacher reference)
## Opening

### A. Engaging the Reader: Quiz-Quiz-Trade (15 minutes)
- Explain to students that you would like them to do a short activity called Quiz-Quiz-Trade using words from the Word Wall to help build their understanding of these words. Post the following directions for students: Quiz-Quiz-Trade:
  1. Find a partner.
  2. Read definition—Read your word’s definition to your partner. Allow him or her to guess the word or ask for a hint.
  3. Give a hint—If your partner needs a hint, say one thing that helps you remember the meaning of this word. Allow your partner to guess and share your word.
  4. Switch—Have your partner read his or her definition and let you guess or receive a hint.
  5. Trade cards, and find a new partner. Repeat Steps 2 through 5.
- Review the directions and clarify or model process if necessary. Distribute Vocabulary word cards. Point out to students that the word is on one side of the card and the definition is on the other, and that there are several new words added from today’s reading. Tell them to be sure to cover the word so their partner cannot see it when trying to guess the word.
- Give students 8 minutes to quiz and trade. Collect the word cards.

### B. Reviewing Learning Targets (5 minutes)
- Invite students to read the learning targets:
  - “I can identify details that support the main idea of a section of Animal Behaviors: Animal Defenses.”
  - “I can paraphrase and take notes on information presented by my peers in Jigsaw groups.”
- Underline the phrase main idea. Ask students to turn and talk with a partner, discussing:
  * “What is the main idea of a text?” Listen for responses like: “It’s the most important idea from the text.”
- Circle the word support and ask them to share with their partner what they think the word determine means. Listen for responses like: “It means to give evidence for or verify.” Tell students that they will find details that support, or verify, the main idea of their section of the text.

## Meeting Students’ Needs

- Discussing and clarifying the language of learning targets helps build academic vocabulary.
**Work Time**

**A. Rereading an Informational Text: Identifying Supporting Details (25 minutes)**

- Remind students that they have been working with a section of *Animal Behavior: Animal Defenses* to determine the main idea.

- Explain that they will now have a chance to reread their section of the text with their expert groups to find details that support the main idea of their section.

- Invite students to gather into their expert groups and turn and talk about the following question:
  
  * “What is the main idea of your expert group’s section of *Animal Behavior: Animal Defenses*?”

- Tell students to open to pages 9 and 10 of their *Animal Defenses Research Journal* to the Determining the Main Idea note-catcher. Ask:
  
  * “How do we identify details that support the main idea of a section of the text?”

- Listen for students describing the process discussed in Lesson 4, saying something like: “We reread the text paragraph by paragraph, thinking about the main idea and looking for facts or details that the author used to explain that idea.” Tell students they should write the supporting details for their section only. Explain that they should leave the other sections blank for now.

- Review identifying details that support the main idea of “Avoiding Danger” (pages 7–9, the last two paragraphs on page 21, and the first two paragraphs on page 22) and going through the steps just discussed. Have students turn and talk after each step before discussing the step with the whole group. Model recording the supporting details in the appropriate box on the Determining the Main Idea note-catcher and ask students to do the same.

- Give students 15 minutes to work through the steps with their partners to identify details that support the main idea of their section. Circulate and support as needed. Listen for students using the steps and following class norms when working in a small group. Probe by asking: “How does that detail support the main idea?” or “Why does this detail better support the main idea than that detail?” Be sure to check in with students who gave a thumbs-down at the end of Work Time Part B in Lesson 5 and who expressed that they did not feel confident in meeting the target discussed in the Closing and Assessment of Lesson 4.

- After 15 minutes, invite students to show a thumbs-up if they were able to identify details that support the main idea of their section and a thumbs-down if they were not. Praise students showing a thumbs-up. Check in with students who gave a thumbs-down during the closing of the lesson.

**Meeting Students’ Needs**

- Consider offering selected shorter passages to specific groups based on the readiness and needs of the group. This provides an opportunity for students to read a complex text within the fourth-grade level span, but differentiates the length of the text, not the complexity.

- Graphic organizers and recording forms engage students more actively and provide the necessary scaffolding that is especially critical for learners with lower levels of language proficiency and/or learning. For students needing additional support, provide a partially filled-in graphic organizer.

- Provide ELLs with a sentence starter or frame to aid in language production. For example: *One idea that is repeated again and again is …* or *A detail that supports the main idea of our section is …*

- Some students may benefit from having key sections pre-highlighted in their texts. This will help them focus on small sections.
### Closing and Assessment

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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</thead>
<tbody>
<tr>
<td><strong>A. Jigsaw Share and Debrief (15 minutes)</strong></td>
</tr>
<tr>
<td>• Explain to students that they will now regroup into triads, with one person from each expert Jigsaw group in each triad. Tell students they will be sharing the main idea of their section as well as the details their group identified as best supporting the main idea.</td>
</tr>
<tr>
<td>• Invite students to use the following steps to share:</td>
</tr>
<tr>
<td>1. Group 1 representative starts. Group 2 and 3 representatives listen.</td>
</tr>
<tr>
<td>2. Group 1 representative tells partners the main idea of his or her section. Group 2 and 3 representatives paraphrase the main idea.</td>
</tr>
<tr>
<td>3. Group 2 and 3 representatives write the main idea of that section in the appropriate spot on their Determining the Main Idea note-catchers.</td>
</tr>
<tr>
<td>4. Group 1 representative shares supporting details. Group 2 and 3 representatives paraphrase the supporting details.</td>
</tr>
<tr>
<td>5. Group 2 and 3 representatives write the supporting details for that section in the appropriate spot on their note-catchers.</td>
</tr>
<tr>
<td>6. Repeat the process for Group 2 representative’s share and Group 3 representative’s share.</td>
</tr>
<tr>
<td>• Circulate and support as needed. Use this as an opportunity for formative assessment for the targets “I can paraphrase portions of a text that is read aloud to me,” (SL.4.2) and “I can document what I learn about a topic by taking notes” (W.4.8).</td>
</tr>
<tr>
<td>• Debrief using the Jigsaw protocol.</td>
</tr>
<tr>
<td>• Use the Fist to Five Checking for Understanding technique to ask students to rate their participation in the Jigsaw. Tell students to show a fist if they did not participate, did not add to their group’s conversation, or did not follow class norms. Tell students to show a five if they consistently participated, added to their group’s conversation, stayed on task, and followed class norms.</td>
</tr>
<tr>
<td>• Inform students that they will continue working with this article in the next lesson.</td>
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</table>

### Homework

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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<tbody>
<tr>
<td>• Reread your section of Animal Behavior: Animal Defenses read in today’s lesson. While you read, write down words that you do not know the meaning of. Choose one word you circled and try to figure out the definition of it. Write down how you figured out what the word meant as well.</td>
</tr>
</tbody>
</table>
Teacher Directions: Type in six words and definitions that your class has recorded on the Word Wall or in the vocabulary section of the Animal Defenses research journal into the following template and make enough copies so that each student will have a card (most likely two or more sets).

<table>
<thead>
<tr>
<th>Word</th>
<th>Definition</th>
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</tbody>
</table>
**Teacher Directions:** Type in six words and definitions that your class has recorded on the Word Wall or in the vocabulary section of the Animal Defenses research journal into the following template and make enough copies so that each student will have a card (most likely two or more sets).

<table>
<thead>
<tr>
<th>Word Card 1</th>
<th>Definition 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word Card 2</td>
<td>Definition 2</td>
</tr>
<tr>
<td>Word Card 3</td>
<td>Definition 3</td>
</tr>
<tr>
<td>Word Card 4</td>
<td>Definition 4</td>
</tr>
<tr>
<td>Word Card 5</td>
<td>Definition 5</td>
</tr>
<tr>
<td>Word Card 6</td>
<td>Definition 6</td>
</tr>
</tbody>
</table>
### “Avoiding Danger” (pages 7–9, stopping at “Self-Defense”; last two paragraphs on page 21; and “Escape Artists” first two paragraphs on page 22)

**Main Idea:**
Animals use many behaviors to defend themselves from predators.

**Supporting Details:**
- “The black bands that run down the gazelles’ sides quiver, passing along the message: ‘Danger!’” (page 7)
- “being alert is the first step an animal takes to defend itself.” (page 9)
- “Most animals are born ‘knowing’ how to defend themselves.” (page 9)
- “Hiding, camouflage, and masking help animals avoid predators.” (page 21)
- “For many animals, this defense is escape.” (page 22)

### “Bad Smells, Bad Tastes, and Powerful Poisons” (pages 55–56, stopping at “Poisonous Prey”; pages 58–60)

**Main Idea:**
Many animals that protect themselves with chemical defenses are brightly colored to warn predators to stay away.

**Supporting Details:**
- “these chemicals may have a bad taste, a terrible smell, or both. They may irritate the skin as well as the senses. They also may be poisonous.” (page 55)
- “bright colors can also be warning colors ... the colors say to predators, ‘Don’t even think of attacking me. You’ll be sorry.’” (page 58)
- “the predator learns that it is a bad idea to attack this sort of prey. It is unlikely to go after another animal that looks like this disastrous meal.” (page 58)
- “ladybugs with bright red shells and black dots are also wearing warning colors. The bright pattern signals that the ladybug may sicken or kill a small animal that eats it.” (page 59)
- “Moths, butterflies, and caterpillars that are poor-tasting or poisonous have warning colors as well.” (page 60)
**Source:** Animal Behavior: Animal Defenses

Reread the text and identify the main idea for each section of the text.

<table>
<thead>
<tr>
<th>“Venomous Stings and Bites” (page 73; “How Venom Works” box on page 76; “Stinging Tentacles” pages 77–78)</th>
<th>Supporting Details:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Idea:</strong> Some animals protect themselves by injecting venom into their enemy.</td>
<td>“a venomous animal has a sting, spines, or specialized teeth attached to venom-making glands” (page 73) “some venomous animals use venom to catch their own prey” (page 73) “many venomous animals ... are camouflaged. This helps them sneak up on prey.” (page 73) “the body of a venomous animal uses energy to make venom ... even an animal that makes venom only for self-defense is usually slow to use it. It is more likely to hide, flee, or warn a predator to stay away.” (page 76) “when an animal—either predator or prey—comes in contact with a tentacle with venomous nematocysts, the nematocysts launch their harpoons.” (page 77)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>“Mimicry” (pages 91–94)</th>
<th>Supporting Details:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Idea:</strong> Some animals protect themselves by mimicking other animals.</td>
<td>“mimicry includes sounding, smelling, acting, or otherwise resembling another animal” (page 91) “an insect that looks and acts like a bee ... is not hiding. It is imitating a living thing that a predator could eat. At the same time, it warns the predator not to attack.” (page 91–92) “animals mimic their prey in order to hunt them” (page 93) “venomous animals mimic less harmful animals” (page 92) “other animals mimic to live inside other animals’ nests” (page 92)</td>
</tr>
</tbody>
</table>
Mid-Unit Assessment: Reading about Caterpillars, Answering Questions, and Determining the Main Idea
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

<table>
<thead>
<tr>
<th>Target</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can determine the main idea using specific details from the text.</td>
<td>(RI.4.2)</td>
</tr>
<tr>
<td>I can interpret information presented through charts or graphs.</td>
<td>I can explain how that information helps me understand the text around it. (RI.4.7)</td>
</tr>
<tr>
<td>I can determine the meaning of academic words or phrases in an</td>
<td>informational text. (RI.4.4)</td>
</tr>
<tr>
<td>informational text.</td>
<td>I can determine the meaning of content words or phrases in an informational text. (RI.4.4)</td>
</tr>
</tbody>
</table>

### Supporting Learning Targets

- I can make inferences about caterpillar defense mechanisms by examining articles that include text and diagrams.
- I can determine the main idea of a text on caterpillar defense mechanisms.
- I can find the meanings of unfamiliar words to help me better understand “Award-Winning Survival Skills: How Animals Elude Prey.”

### Ongoing Assessment

- Mid-Unit 1 Assessment
- Animal Defenses research journal glossary
# Agenda

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>1. Opening</strong></td>
<td><strong>Teaching Notes</strong></td>
</tr>
<tr>
<td></td>
<td>• This is the third lesson where students reread sections from <em>Animal Behavior: Animal Defenses</em>. In the previous lessons, students worked in expert Jigsaw groups to examine a diagram in their section of the anchor text, determine the main idea of their section, and identify details that support the main idea. In this lesson, students make meaning of unfamiliar words in their section of the text.</td>
</tr>
<tr>
<td>A. Reviewing Learning Targets (5 minutes)</td>
<td></td>
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<tr>
<td><strong>2. Work Time</strong></td>
<td></td>
</tr>
<tr>
<td>A. Mid-Unit 1 Assessment: Answering Questions and Determining the Main Idea of a Text about Caterpillars (30 minutes)</td>
<td>• Students work in partners while figuring out the meaning of unknown words. You may wish to determine the partnerships in advance and strategically group students. One possible arrangement you may consider would be to partner ELLs who speak the same home language in the same group, allowing them to have more meaningful discussions and clarify points in their native language. Or, you may partner students who have demonstrated proficiency with this target with students who have been struggling so the proficient students may support the students who struggle.</td>
</tr>
<tr>
<td>B. Rereading an Informational Text: A Closer Look at Words (15 minutes)</td>
<td>• In advance: Determine partnerships.</td>
</tr>
<tr>
<td><strong>3. Closing and Assessment</strong></td>
<td>• Post: Learning targets.</td>
</tr>
<tr>
<td>A. Reflect on Learning Targets: Tracking My Progress (10 minutes)</td>
<td></td>
</tr>
<tr>
<td><strong>4. Homework</strong></td>
<td></td>
</tr>
<tr>
<td>A. Continue your independent reading.</td>
<td></td>
</tr>
</tbody>
</table>
**Lesson Vocabulary**

- progress, track, reflect

**Materials**

- Mid-Unit 1 Assessment: Reading about Caterpillars, Answering Questions, and Determining the Main Idea (one per student)
- Mid-Unit 1 Assessment: Reading about Caterpillars, Answering Questions, and Determining the Main Idea (answers, for teacher reference)
- *Animal Behavior: Animal Defenses* (one per student)
  - Teacher model—“Avoiding Danger” (page 7–9, stopping at “Self-Defense”; last two paragraphs on page 21; “Escape Artists” first two paragraphs on page 22)
  - Group 1—“Bad Smells, Bad Tastes, and Powerful Poisons” (page 55—top of 56, stopping at “Poisonous Prey”; pages 58–60)
  - Group 2—“Venomous Stings and Bites” (page 73; “How Venom Works” box on page 76; “Stinging Tentacles” pages 77–78)
  - Group 3—“Mimicry” (pages 91–94)
- Close Readers Do These Things anchor chart (from Module 1, Unit 1, Lesson 3; or re-created in this module, Lesson 2)
- Vocabulary Strategies anchor chart (from Lesson 3)
- Equity sticks
- Animal Defenses research journal (from Lesson 1; one per student)
- Animal Defense Mechanisms glossary (page 26 of Animal Defenses research journal; from Lesson 3; one per student and one to display)
- Sticky notes (two per student)
- Animal Defense Mechanisms Word Wall (from Lesson 3)
- Blank Word Wall cards (one index card for every two students)
- Tracking My Progress, Mid-Unit 1 recording form (one per student and one to display)
### Opening

**A. Reviewing Learning Targets (5 minutes)**
- Tell students that today they will complete a formal assessment in which they will do on their own much of what they have been practicing:
  - Examine and make inferences about a diagram in an informational text.
  - Read an informational text.
  - Identify and record the main idea in the graphic organizer.
  - Answer questions that are dependent on the text.
- Remind them that they will need to refer to the text in order to answer the questions thoroughly.
- Encourage the students to do their best. Let them know that this is a chance to show what they know and how much effort they are making to read carefully and identify important details in an informational text. This also is an opportunity to discover even more about animal defense mechanisms.
- Ask the students to read the first two learning targets silently:
  * “I can make inferences about caterpillar defense mechanisms by examining articles that include text and diagrams.”
  * “I can determine the main idea of a text on caterpillar defense mechanisms.”
- Have them give a thumbs-up if they are clear on what they will be expected to do, a thumbs-sideways if they understand part but not all of what to do, and a thumbs-down if they are very unsure about what they should do. Address any clarifying questions before beginning the assessment.

### Meeting Students’ Needs

- Discussing and clarifying the language of learning targets helps build academic vocabulary.
## Work Time

### A. Mid-Unit 1 Assessment: Answering Questions and Determining the Main Idea of a Text about Caterpillars (30 minutes)
- Distribute the *Mid-Unit 1 Assessment: Reading about Caterpillars, Answering Questions, and Determining the Main Idea* to each student. Address any clarifying questions.
- Give students 30 minutes to complete the assessment.
- While students are taking the assessment, circulate to monitor their test-taking skills. This is an opportunity to analyze students’ behaviors while taking an assessment. Document strategies students are using during the assessment. For example, look for students annotating their text, using their graphic organizer to take notes before answering questions, and referring to the text as they answer questions.

### Meeting Students’ Needs
- If students receive accommodations for assessments, communicate with the cooperating service providers regarding the practices of instruction in use during this study as well as the goals of the assessment.
- For some students, this assessment may require more than the 30 minutes allotted. Consider providing students time over multiple days if necessary.
- Asking students to identify challenging vocabulary helps them monitor their understanding of a complex text. When students annotate the text by circling these words, it can also provide a formative assessment for the teacher.

## B. Rereading an Informational Text: A Closer Look at Words (15 minutes)
- Explain to students that they will now have a chance to reread their section from *Animal Behavior: Animal Defenses* again and practice figuring out the meaning of challenging words. Remind and point out on the *Close Readers Do These Things anchor chart* that close readers read and reread texts many times in order to deeply understand a text.
- Review the *Vocabulary Strategies anchor chart* and use *equity sticks* to call on students to read the strategies listed in the previous lesson. Invite students to turn and talk, asking:
  * “What strategy do you use most often trying to figure out what a word means?”
### Work Time (continued)

- Cold call two or three students to share their partner’s response.
- Tell students that they now are going to practice some of these strategies while rereading *Animal Behavior: Animal Defenses* to determine the meaning of some challenging words.
- Invite students to take out their homework from Lesson 6—a list of words that you do not know the meaning of, the definition of one word from that list, and an explanation for how you figured out what the word meant. Explain to students that they will choose at least three of these words to define and record in their *Animal Defenses research journals*.
- Invite students to open to the *Animal Defense Mechanisms glossary* on page 26 in the back of their research journals. Remind students that glossaries are a text feature authors often use in nonfiction texts, and that they are found at the end of books. Also remind students that they are formatted so the words appear in alphabetical order. Ask:
  - *“What do we do when recording a word into the glossary of our research journals?”*
- Listen for responses like: “We will find the word we are defining in the glossary, then write the definition, then write the vocabulary strategy we used to determine the meaning of that word, and then draw a quick sketch or diagram showing what that word means.”
- Explain that with a partner from their expert Jigsaw group, students will reread the text after they have determined and recorded the definitions of these words and talk with their partners about their understanding of the words. Post the following directions:
  1. Find the meaning of at least three words you recorded for homework after Lesson 6.
  2. With your partners, determine the meaning of each word.
  3. Find the word in your glossary and write the definition, the strategy you used to figure out the meaning, and a sketch representing the word.
  4. Reread the text with your partners.
  5. Discuss the following questions: How has your understanding of these words changed? Which words are still confusing for you and why? Record your questions on a sticky note.
<table>
<thead>
<tr>
<th>Work Time (continued)</th>
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<tbody>
<tr>
<td>• If necessary, review Steps 1 and 2 briefly by saying: “Let’s review how we did this with the word ‘predator.’ First we flipped through the glossary until we found it. Remember, it’s set up so the words are in alphabetical order, so since that starts with the letter P, it was toward the middle of the glossary. Then we wrote the definition of the word. We figured out that it meant an animal that lives by killing and eating another animal, so that’s what we wrote in the definition box. Then we thought about what vocabulary strategy we used to figure out the meaning of that word. We read on in the article and did some inferring to figure out what it meant. So I wrote ‘reading on in the text and infer’ in the ‘Vocabulary Strategy I Used to Learn This Word’ box. The last thing we did was a quick sketch showing what this word meant. I drew a sketch of an armadillo and a jaguar since that was an example from the article, and I drew an arrow pointing to the jaguar since that’s the predator in the sketch.”</td>
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<tr>
<td>• Give students 10 minutes to look at least three words from their lists, record their definitions, strategy used, and sketch, and discuss their understanding. Circulate and support pairs as needed. Remind them to record their words at the end of their glossaries. If necessary, ask questions like: “How did you figure out the meaning of that word?” or “Are there any clues in the article that can help you figure out what that word means?” Listen for students discussing the meanings of the words and using strategies from the Vocabulary Strategies anchor chart when determining the meanings.</td>
</tr>
<tr>
<td>• Cold call partners to share their definitions and visuals/notes for each word. Clarify the definition of each word if necessary.</td>
</tr>
<tr>
<td>• Point out the Animal Defense Mechanisms Word Wall to students. Distribute one blank Word Wall card (index card) to each pair. Invite student pairs to choose a word they discussed to write on their Word Wall card and post to the Word Wall.</td>
</tr>
<tr>
<td>Meeting Students’ Needs</td>
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</tbody>
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# Closing and Assessment

<table>
<thead>
<tr>
<th>A. Reflect on Learning Targets: Tracking My Progress (10 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congratulate students on their hard work on the assessment. Distribute the <strong>Tracking My Progress, Mid-Unit 1 recording form</strong>. Remind students that successful learners keep track and reflect on their own learning. Point out that students have been doing this informally during debriefs when they consider how well they are progressing toward targets.</td>
<td>• Developing self-assessment and reflection supports all students, but research shows it supports struggling learners most.</td>
</tr>
<tr>
<td>Review Step 1 in the self-assessment and remind students that this is where you would like them to explain what the target means to them. For example, the first target uses the phrase “determine the main idea using specific details.” They should write what the target means “in their own words” by explaining what it means to figure out the main idea of a text and how details are used to support it.</td>
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<tr>
<td>Point out the second step, and explain that this is similar to the thumbs-up, -sideways, or -down that they have used in previous lessons. They should also explain why they think they “need more help,” “understand some,” or are “on the way,” and give examples. Consider giving students an example such as: “I circled that I need more help, because I can’t remember what the word <em>determine</em> means.”</td>
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<tr>
<td>Collect students’ self-assessments to use as formative assessment to guide instructional decisions.</td>
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## Homework

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Continue your independent reading.</td>
</tr>
</tbody>
</table>
Hanging by a Thread

By Sharon T. Pochron, Ph.D.
Photos by Ignacio Castellanos, Ph.D.
Art by Linda Weller

Caterpillars have a trick to get out of danger.
How do they know when to use it?

A wasp crept toward a caterpillar on a leaf. Dr. Ignacio Castellanos of Mexico watched. He knew the wasp was a caterpillar predator, which meant it ate caterpillars. He wondered what the caterpillar would do. Would it do anything?

As the predator walked closer to the caterpillar, the caterpillar spun a silk thread and jumped. It hung from the leaf by its thread. The wasp did not know where the caterpillar went. The caterpillar was safe!

Knowing Without Seeing
Caterpillars cannot see, hear, or smell very well. Castellanos wondered how the caterpillar knew the predator was approaching. He and Dr. Pedro Barbosa of Maryland wanted to find out. They thought that maybe the caterpillar could feel the leaf wiggle, or vibrate.

Wasps and stinkbugs eat caterpillars. When these insects walk on a leaf to eat a caterpillar, the leaf wiggles. But the wind, falling sticks, and insects that do not eat caterpillars might also wiggle the leaf. Could caterpillars tell the difference between something safe and something
Caterpillars Are Wiggle-Wise

The scientists put caterpillars on leaves and used another machine to make the leaves vibrate. When the leaves shook the way a predator would shake them, caterpillars behaved as if a real predator were on the leaf. They spun threads and hung.

When the leaves shook as if the wind were blowing or rain were falling, caterpillars did nothing. When the leaves shook as if insects that do not eat caterpillars were walking on the leaves, the caterpillars ignored the shaking.

The scientists also found that caterpillars could tell the difference between kinds of predators. Both stinkbugs and wasps have to be very close to a caterpillar to see it, but stinkbugs must be even closer. So when stinkbugs were on the leaf, caterpillars could hang from short threads and not be noticed. When wasps were on the leaf, caterpillars spun longer threads to hang farther down—and out of sight.

So now we know that caterpillars can tell dangerous wiggles from other kinds of wiggles. People might have to pay attention to what’s in front of their nose, but caterpillars have to pay attention to what vibrates under their feet.
Mid-Unit 1 Assessment: Reading about Caterpillars, Answering Questions, and Determining the Main Idea

Learning Targets Assessed:
I can determine the main idea using specific details from the text. (RI.4.2)
I can interpret information presented through charts or graphs. I can explain how that information helps me understand the text around it. (RI.4.7)
I can determine the meaning of academic words or phrases in an informational text. (RI.4.4)
I can determine the meaning of content words or phrases in an informational text. (RI.4.4)

Part 1: Use the text to answer the questions below.

1. Look at the diagram on the first page of “Hanging by a Thread.”
2. In the first column of the graphic organizer below, record three details you see in the diagram.
3. In the second column of the graphic organizer, record the inferences you make based on these details.

**NOTE: Do NOT complete the right-hand column of the graphic organizer yet!**
**NOTE: Do NOT complete the right-hand column of the graphic organizer yet!**

<table>
<thead>
<tr>
<th>Details from the Diagram (explicit information)</th>
<th>My Inferences (what I infer about caterpillars)</th>
<th>Details in the Text That Support My Inferences (confirmed with explicit information)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.)</td>
<td>1.)</td>
<td>1.)</td>
</tr>
<tr>
<td>2.)</td>
<td>2.)</td>
<td>2.)</td>
</tr>
<tr>
<td>3.)</td>
<td>3.)</td>
<td>3.)</td>
</tr>
</tbody>
</table>

*NOTE: Do NOT complete this right-hand column of the graphic organizer until you have done Steps 1–3 and have read the text in Part 2.*
Mid-Unit 1 Assessment: Reading about Caterpillars, Answering Questions, and Determining the Main Idea

Part 2

Directions

1. Read “Hanging by a Thread” for the gist.
2. In the right-hand column of the graphic organizer above, record details from the text that support your inferences in the middle column.
3. Reread the text to answer the following questions.

1. According to “Hanging by a Thread,” how do caterpillars know to spin a thread and jump off a leaf?
   a. Caterpillars see the leaf wiggle from the predator moving.
   b. Caterpillars hear the leaf wiggle from the predator moving.
   c. Caterpillars smell their predators on the leaf.
   d. Caterpillars feel the leaf wiggle from the predator moving.

2. According to “Hanging by a Thread,” what best describes what Dr. Castellanos and Dr. Barbosa did to find out how caterpillars knew the predator was approaching?
   a. They observed wasps approach caterpillars.
   b. They recorded leaves vibrating.
   c. They put caterpillars on leaves and used a machine to make the leaves vibrate in different ways.
   d. They observed stinkbugs approach caterpillars.

3. Which line from the text is the best evidence to support the answer to Question 2?
   a. “So when stinkbugs were on the leaf, caterpillars could hang from short threads and not be noticed.”
   b. “When the leaves shook the way a predator would shake them, caterpillars behaved as if a real predator were on the leaf.”
   c. “First, they needed to know how to make the leaf vibrate.”
   d. “He knew the wasp was a caterpillar predator, which meant it ate caterpillars.”
4. In the section “Knowing without Seeing,” the text says, “The scientists wanted to make the leaf vibrate and watch what the caterpillar did.” Which word is a synonym for the word *vibrate*?

   a. shake  
   b. hang  
   c. dangerous  
   d. be still

5. Which line from the text is the best evidence to support the answer to Question 4?

   a. “It hung from the leaf by its thread.”  
   b. “When these insects walk on a leaf to eat a caterpillar, the leaf wiggles.”  
   c. “Could caterpillars tell the difference between something safe and something dangerous?”  
   d. “They used a special machine to record vibrations.”
Part 3: Reread the text and determine the main idea for each section of the text. Identify two details that support the main idea for each section.

<table>
<thead>
<tr>
<th>Opening</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Idea:</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowing without Seeing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Idea:</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Caterpillars Are Wiggle-Wise</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Idea:</strong></td>
</tr>
</tbody>
</table>
Mid-Unit 1 Assessment: Reading about Caterpillars, Answering Questions, and Determining the Main Idea
(Answers, for Teacher Reference)

Learning Targets Assessed:
I can determine the main idea using specific details from the text. (RI.4.2)
I can interpret information presented through charts or graphs. I can explain how that information helps me understand the text around it. (RI.4.7)
I can determine the meaning of academic words or phrases in an informational text. (RI.4.4)
I can determine the meaning of content words or phrases in an informational text. (RI.4.4)

Part 1: Use the text to answer the questions below.

1. Look at the diagram on the first page of “Hanging by a Thread.”
2. In the first column of the graphic organizer below, record three details you see in the diagram.
3. In the second column of the graphic organizer, record the inferences you make based on these details.

**NOTE: Do NOT complete the right-hand column of the graphic organizer yet!

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<thead>
<tr>
<th>Details from the Diagram (explicit information)</th>
<th>My Inferences (what I infer about caterpillars)</th>
<th>Details in the Text That Support My Inferences (confirmed with explicit information)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.) A stinkbug is on the leaf.</td>
<td>1.) The stinkbug wants to eat the caterpillar.</td>
<td>1.) “the caterpillar spun a silk thread and jumped. It hung from the leaf by its thread.”</td>
</tr>
<tr>
<td>2.) A caterpillar is on the leaf.</td>
<td>2.) The stinkbug is a caterpillar’s predator.</td>
<td>2.) “the caterpillar was safe!”</td>
</tr>
<tr>
<td>3.) A white thread hanging from leaf to caterpillar</td>
<td>3.) Caterpillars swing from a white thread to get away from predators.</td>
<td>3.) “they spun threads and hung”</td>
</tr>
</tbody>
</table>
Mid-Unit 1 Assessment: Reading about Caterpillars, Answering Questions, and Determining the Main Idea
(Answers, for Teacher Reference)

Part 2

Directions
1. Read “Hanging by a Thread” for the gist.
2. In the right-hand column of the graphic organizer above, record details from the text that support your inferences in the middle column.
3. Reread the text to answer the following questions.

1. According to “Hanging by a Thread,” how do caterpillars know to spin a thread and jump off a leaf?
   a. Caterpillars see the leaf wiggle from the predator moving.
   b. Caterpillars hear the leaf wiggle from the predator moving.
   c. Caterpillars smell their predators on the leaf.
   d. **Caterpillars feel the leaf wiggle from the predator moving.**

2. According to “Hanging by a Thread,” what best describes what Dr. Castellanos and Dr. Barbosa did to find out how caterpillars knew the predator was approaching?
   a. They observed wasps approach caterpillars.
   b. They recorded leaves vibrating.
   c. **They put caterpillars on leaves and used a machine to make the leaves vibrate in different ways.**
   d. They observed stinkbugs approach caterpillars.

3. Which line from the text is the best evidence to support the answer to Question 2?
   a. “So when stinkbugs were on the leaf, caterpillars could hang from short threads and not be noticed.”
   b. **“When the leaves shook the way a predator would shake them, caterpillars behaved as if a real predator were on the leaf.”**
   c. “First, they needed to know how to make the leaf vibrate.”
   d. “He knew the wasp was a caterpillar predator, which meant it ate caterpillars.”
4. In the section “Knowing without Seeing,” the text says, “The scientists wanted to make the leaf vibrate and watch what the caterpillar did.” Which word is a synonym for the word *vibrate*?
   a. shake
   b. hang
   c. dangerous
   d. be still

5. Which line from the text is the best evidence to support the answer to Question 4?
   a. “It hung from the leaf by its thread.”
   b. “When these insects walk on a leaf to eat a caterpillar, the leaf wiggles.”
   c. “Could caterpillars tell the difference between something safe and something dangerous?”
   d. “They used a special machine to record vibrations.”
Part 3: Reread the text and determine the main idea for each section of the text. Identify two details that support the main idea for each section.

<table>
<thead>
<tr>
<th>Opening</th>
<th>Supporting Details:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Idea: Dr. Ignacio Castellanos observed what a caterpillar did to avoid a wasp.</td>
<td>Supporting Details:</td>
</tr>
<tr>
<td>• Dr. Ignacio Castellanos of Mexico watched.”</td>
<td>• “As the predator walked closer to the caterpillar, the caterpillar spun a silk thread and jumped</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowing without Seeing</th>
<th>Supporting Details:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Idea: Scientists wondered if caterpillars can feel leaves vibrate when a predator comes close and hang from a thread to protect themselves.</td>
<td>Supporting Details:</td>
</tr>
<tr>
<td>• “Caterpillars cannot see, hear, or smell very well.”</td>
<td>• “The scientists wanted to make the leaf vibrate and watch what the caterpillar did.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Caterpillars Are Wiggle-Wise</th>
<th>Supporting Details:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Idea: Caterpillars can tell what is making the leaf shake from the way it vibrates.</td>
<td>Supporting Details:</td>
</tr>
<tr>
<td>• “When the leaves shook the way a predator would shake them, caterpillars behaved as if a real predator were on the leaf.”</td>
<td>• “The scientists also found that caterpillars could tell the difference between kinds of predators.”</td>
</tr>
</tbody>
</table>
Learning target: I can determine the main idea using specific details from the text.

1. The target in my own words is:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. How am I doing? Circle one.

I need more help to learn this

I understand some of this

I am on my way!

3. The evidence to support my self-assessment is:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
**Learning target:** I can interpret information presented through charts or graphs. I can explain how that information helps me understand the text around it.

1. The target in my own words is:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. How am I doing? Circle one.

   - I need more help to learn this
   - I understand some of this
   - I am on my way!

3. The evidence to support my self-assessment is:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
**Learning target:** I can determine the meaning of unfamiliar words in an informational text.

1. The target in my own words is:

   _______________________________________________________
   _______________________________________________________
   _______________________________________________________
   _______________________________________________________  

2. How am I doing? Circle one.

   I need more help to learn this  
   I understand some of this  
   I am on my way!

3. The evidence to support my self-assessment is:

   _______________________________________________________
   _______________________________________________________
   _______________________________________________________
   _______________________________________________________
Preparing for a Text-Based Discussion: Science
Talk about Animal Defenses
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1)

- a. I can prepare myself to participate in discussions.
- a. I can draw on information to explore ideas in the discussion.

### Supporting Learning Targets

I can effectively participate in a Science Talk about animal defense mechanisms.

- a. I can prepare for the Science Talk by using evidence from animal defense mechanism texts.

### Ongoing Assessment

GRADE 4: MODULE 2B: UNIT 1: LESSON 8
Preparing for a Text-Based Discussion:
Science Talk about Animal Defenses

Agenda

1. Opening
   A. Engaging the Reader: Quiz-Quiz-Trade (15 minutes)
2. Work Time
   A. What Is a Science Talk? (10 minutes)
   B. Preparing Evidence and Questions for the Science Talk (30 minutes)
3. Closing and Assessment
   A. Reflecting on the Learning Targets (5 minutes)
4. Homework
   A. Review notes for the Science Talk.

Teaching Notes

• In this lesson, students prepare for the first of two Science Talks in this unit. This series of Science Talks helps students make progress towards SL.4.1, which is formally assessed in Module 3.

• Science Talks are discussions about big questions or scientific ideas. They provide students the opportunity to collectively theorize and build on each other’s ideas. These talks provide a window on student’s thinking that helps teachers figure out what students really know and what their misconceptions may be.

• Students will need graphic organizers and texts from Lessons 2–7 to prepare for the Science Talk.

• In the opening of this lesson, students use the Quiz-Quiz-Trade protocol to interact with the vocabulary words from this unit in a new way. This routine will be repeated throughout the module for students to deepen their understanding of important vocabulary they will use in their performance task.

• In advance:
  – Review Science Talks, Quiz-Quiz-Trade protocol, and Fist to Five in Checking for Understanding techniques (see Appendix).
  – Prepare sets of Vocabulary word cards using Word Wall words (see supporting materials) so every student has a card.
  – Hang chart paper for Science Talk Norms anchor chart.

• Post: Learning targets.

Lesson Vocabulary

<table>
<thead>
<tr>
<th>Science Talk, effectively, participate, prepare, evidence</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary word cards (see Teaching Notes and supporting materials)</td>
</tr>
<tr>
<td>Science Talk Norms anchor chart (new; teacher-created)</td>
</tr>
<tr>
<td>Preparing for a Science Talk note-catcher (page 11 of the Animal Defenses research journal; one per student and one to display)</td>
</tr>
<tr>
<td>Preparing for a Science Talk note-catcher (completed, for teacher reference)</td>
</tr>
</tbody>
</table>
A. Engaging the Reader: Quiz-Quiz-Trade (15 minutes)

- Tell students that today they will discuss the question: “How do animals’ bodies help them survive?” Explain that now that they have read about animal defense mechanisms, they should have new thoughts or ideas related to this question. Explain that today they will prepare for this talk by reviewing the vocabulary that they have collected related to animal defenses. Remind students that they have been recording vocabulary words into their Animal Defenses research journals and that the class has also been building a Word Wall with these terms.

- Tell students they will do a short activity called Quiz-Quiz-Trade using words from the Word Wall to help build their understanding of these words. Remind students that they practiced vocabulary with this activity in Lesson 6. Review the directions: Quiz-Quiz-Trade:

1. Find a partner.
2. Read definition—Read your word’s definition to your partner. Allow him or her to guess the word or ask for a hint.
3. Give a hint—If your partner needs a hint, say one thing that helps you remember the meaning of this word. Allow your partner to guess and share your word.
4. Switch—Have your partner read his or her definition and let you guess or receive a hint.
5. Trade cards and find a new partner. Repeat Steps 2 through 5.

- Ask students to read directions and clarify or model the process if necessary. Distribute Vocabulary word cards. Point out to students that the word is on one side of the card and the definition is on the other. Tell them to be sure to cover the word so their partner cannot see it when trying to guess the word.

- Give students 8 minutes to quiz and trade. Collect the Vocabulary word cards (which will be used in a different way in Lesson 9).
A. What Is a Science Talk? (10 minutes)

- Post and read the learning targets:
  * “I can effectively participate in a Science Talk about animal defense mechanisms.”
  * “I can prepare for the Science Talk by using evidence from animal defense mechanism texts.”
- Introduce the Science Talk by saying that researchers share information they have learned with others and ask questions of other experts. This helps experts build their understanding by sharing their own thoughts as well as learn from what others say. Experts in the real world talk all the time to expand their thinking.
- Remind students of all the learning they have done so far about animals and their defense mechanisms. Tell them that they will have the opportunity to use what they’ve learned in a Science Talk. Share today’s first learning target for the Science Talk. “I can effectively participate in a Science Talk about animal defense mechanisms.” Ensure that students understand the meaning of the words effectively and participate.
- Inform students that a Science Talk is a discussion about big or important questions scientists have. While scientists discuss these big questions with one another, it is important for them to create a set of rules, or norms, that they will all follow so everyone’s ideas can be heard and considered.
- Start a Science Talk Norms anchor chart. Focus students’ attention on the phrase effectively participate. Ask students what it looks/sounds like to effectively participate with peers, listening for ideas such as: “Wait my turn to speak, so I am heard; don’t shout/speak too loudly; make sure everyone gets a turn to speak; no one person does most/all of the speaking; use information from text to support my ideas,” etc. Add students’ ideas to the anchor chart.

Meeting Students’ Needs

- Science Talks help your ELLs process their thinking verbally and learn from others’ thoughts.
- Encourage students to agree or disagree using thumbs-ups or thumbs-down. This can help students who struggle with language to process what their peers are saying.
- Consider drawing visuals next to each norm, giving ELLs another access point to understand the text. Providing visual models of academic vocabulary supports language development and comprehension.
### B. Preparing Evidence and Questions for the Science Talk (30 minutes)

- Ask the class the Science Talk question: “How do animals’ bodies help them survive?” During this talk, students will begin to deepen their understanding of how animals’ bodies and behaviors help them survive.

- Refer to the second learning target for today: “I can prepare for the Science Talk by using evidence from animal defense mechanism texts” and explain the importance of experts sharing specific evidence from texts in their discussions with others.

- Show the **Preparing for a Science Talk note-catcher** on page 11 of their research journals and invite students to open to it. Point out the different sections for recording notes on this page. Indicate to students that they will only be taking notes on the first section (T-chart) of the recording form labeled “Preparation.” The last three sections will be saved for the actual Science Talk as well as for teacher feedback and goal setting when the Science Talk is over.

- Briefly model how to fill in the left column titled “When I read or see that (evidence) ...” and use evidence from texts used in learning about animal defense mechanisms. Say something like: “We’ll use our Animal Defenses research journal and the texts we’ve read in this unit to collect evidence that answers the Science Talk question. I’ll start by flipping to the first Listening Closely note-catcher” (turn to page 2 of the research journal). “I’ll skim this page to see if there is any evidence I can use that will answer the Science Talk question. I remember that this text was about how spiders use venom to survive—I’ll write it in the first box of my note-catcher: ‘most spiders are venomous.’ I’ll also note where I found this information—it was on page 8 of *Venom*, so I’ll write that after my note.”

- Explain to students that the right column labeled “It makes me think that animals’ bodies help them survive by ...” is a space for them to justify their facts from the left column. Again, briefly model how to record an example of what could be written in the right column. Say something like: “So, how does the venom help spiders survive? I think that it paralyzes or kills the spiders’ prey and its enemies. So I’ll write that in this box.”

- Remind students that they will only be recording important facts about their animal’s body that help it survive and why they think the fact is accurate in the T-chart in the first section of the Preparing for a Science Talk note-catcher. Explain that the second section, “My Science Talk Notes: Ideas and Questions,” will be used during the Science Talk and needs to be left blank until the class begins the discussion in Lesson 9.

- Give students 20 minutes to complete their first section of the Preparing for a Science Talk note-catcher. Confer with the class as necessary, and remind them to use specific evidence from the text to support their thinking.
### Work Time (continued)

- Circulate and check in with students as they work independently. To ensure that students use specific evidence from texts they’ve read, ask them questions like: “Where in the text did you find that fact?” or “How do you know that fact helps answer our question, ‘How do animals’ bodies help them survive?’” Encourage them to record page numbers and text titles with their evidence so they can easily refer to it if needed during the Science Talk.

### Closing and Assessment

**A. Reflecting on the Learning Targets (5 minutes)**

- Invite students to gather together with their Preparing for a Science Talk note-catcher. Ask them to look over their notes and decide how prepared they feel for tomorrow’s Science Talk using the Fist to Five assessment strategy.
  
  - Fist—“I am completely confused about what I’m supposed to do and am not prepared at all!”
  - One finger—“I kind of know what I’m doing but still need more support and/or time.”
  - Two fingers—“I’m getting there. I know what I need to do, I just need a little more support and/or time.”
  - Three fingers—“I’m almost there.”
  - Four fingers—“I’m feeling really good about tomorrow’s Science Talk.”
  - Five fingers—“I’m ready to do the Science Talk right now! Let’s go!”

### Homework

- Review notes for the Science Talk.
  
  - If you rated yourself at a three or less on the Fist to Five, reread your note-catchers and add more information in your Preparing for a Science Talk note-catcher in order to be better prepared for the Science Talk.
  
  - If you rated yourself at a four or five on the Fist to Five, take some time tonight to review your notes on Preparing for a Science Talk note-catcher for the Science Talk.
**Teacher Directions:** Copy the following words and their definitions front to back and make enough copies so that each student will have a card (3 to 4 sets).

<table>
<thead>
<tr>
<th>defense mechanism</th>
<th>mimicry</th>
</tr>
</thead>
<tbody>
<tr>
<td>predator</td>
<td>threaten</td>
</tr>
<tr>
<td>prey</td>
<td>venom</td>
</tr>
<tr>
<td>habitat</td>
<td>survive</td>
</tr>
</tbody>
</table>
**Teacher Directions:** Copy the following words and their definitions front to back and make enough copies so that each student will have a card (3 to 4 sets).

<table>
<thead>
<tr>
<th>-traits or behaviors that protect animals</th>
<th>-defense of looking like another animal</th>
</tr>
</thead>
<tbody>
<tr>
<td>-to pull out</td>
<td>-in danger</td>
</tr>
<tr>
<td>to do something wild with fear</td>
<td>-toxin that is injected with a stinger, fang, or spine</td>
</tr>
<tr>
<td>-a place where an animal lives</td>
<td>-to live</td>
</tr>
</tbody>
</table>
**Question:** How do animals’ bodies help them survive?

**Preparation:** Look back in your Animal Defenses research journal and texts about animal defense mechanisms to find evidence to help you answer the Science Talk question.

<table>
<thead>
<tr>
<th>When I read or see that (evidence) ...</th>
<th>It makes me think that animals’ bodies help them survive by ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Example) most spiders are venomous (<em>Venom</em> page 8)</td>
<td>(Example) I think that the venom paralyzes or kills the spider’s prey and enemies.</td>
</tr>
<tr>
<td>the mimic octopus mimics other creatures to turn off predators (“Award-Winning Survival Skills: How Animals Elude Prey”)</td>
<td>I think that since the mimic octopus can change to look like other dangerous animals, its enemies probably stay away from them because they think the octopus is dangerous and will poison or hurt them.</td>
</tr>
<tr>
<td>the three-banded armadillo rolls into a ball (“Award-Winning Survival Skills: How Animals Elude Prey”)</td>
<td>I think that it rolls into a ball to protect the parts of its body that don’t have a shell—its head, legs, and tail. By rolling into a ball, these parts are under its hard armor and protected from its enemies.</td>
</tr>
<tr>
<td>“bright colors can also be warning colors” (<em>Animal Behavior: Animal Defenses</em> page 58)</td>
<td>I think that the colors warn predators that the animal is dangerous, so they learn to stay away from it.</td>
</tr>
</tbody>
</table>
Text-Based Discussion: Science Talk about Animal Defenses
### Text-Based Discussion:

**Science Talk About Animal Defenses**

#### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1)

- a. I can draw on information to explore ideas in the discussion.
- b. I can follow our class norms when I participate in a conversation.
- c. I can ask questions that are on the topic being discussed.
- d. I can connect my questions and responses to what others say.

#### Supporting Learning Targets

- I can effectively participate in a Science Talk about animal defense mechanisms.
- b. I can ask questions so I am clear about what is being discussed.
- c. I can ask questions on the topic being discussed.
- d. I can follow our class norms when I participate in a conversation.
- I can observe others participating in a Science Talk.

#### Ongoing Assessment

- Preparing for a Science Talk note-catcher
# Agenda

1. **Opening**
   - A. Engaging the Reader: Connecting Key Vocabulary: Interactive Word Wall (10 minutes)
   - B. Reviewing Learning Targets (5 minutes)

2. **Work Time**
   - A. Preparing for a Science Talk (10 minutes)
   - B. Conducting the Science Talk—Round 1 (15 minutes)
   - C. Conducting the Science Talk—Round 2 (15 minutes)

3. **Closing and Assessment**
   - A. Debrief and Review Homework (5 minutes)

4. **Homework**
   - A. Complete the K and W columns of the Millipede Defense Mechanisms: KWL chart on page 13 of your research journal.

## Teaching Notes

- **Science Talks** provide students the opportunity to collectively theorize and build on each other’s ideas. These talks provide a window on student’s thinking that can help teachers figure out what students really know and what their misconceptions may be.

- Because this lesson is an introduction to the Science Talk for students, it may take longer than 60 minutes to establish norms for the Science Talk, as well as complete both rounds of the Science Talk protocol. Consider breaking this lesson into two class periods if your students need more time to complete each round of the protocol.

- The structure of this Science Talk follows the Fishbowl protocol with two concentric circles, one observing the other as they participate in the Science Talk. The students are paired with a Science Talk partner. Consider intentionally partnering students in heterogeneous partnerships.

- Students will need access to all graphic organizers and texts from Lessons 2–7 to use during the protocol as they justify their answers with evidence from their research. In Lesson 8, students were asked to record the specific texts connected with the facts on their Preparing for a Science Talk graphic organizer as they prepared for the Science Talk. However, some students may need to refer to the actual text during the protocol as questions arise during the discussion.

- At the conclusion of the Science Talk, students set goals teacher feedback from their peers and the teacher to set goals. In Lesson 13, students will use your feedback on their performance during the Science Talk (written on their note-catchers) to improve their performance during their next Science Talk. Be sure to complete feedback on this Science Talk for students by Lesson 13.

- This lesson opens with a vocabulary activity called Interactive Word Wall, sometimes called vocabulary concept mapping. In this activity, students make connections and explain relationships between different vocabulary words they have studied on a given topic. This helps them to better understand the meaning of the individual words and continue to build broader conceptual understanding of the topic.

- Students will be in groups of four to participate in the Interactive Word Wall portion of this lesson.

- In advance: Make enough complete sets of the Vocabulary Note cards (from Lesson 6) so that each group can have a complete set. Also write the directions listed in the supporting materials of this lesson on a piece of chart paper or on the board.

- Review: Science Talk, Interactive Word Wall, and Fishbowl protocols (see Appendix).

- Post: Learning targets.
# Text-Based Discussion: Science Talk About Animal Defenses

<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
</table>
| effectively, participate | • Vocabulary word cards (from Lesson 8; one set per group of four)  
• Interactive Word Wall Directions (for teacher reference)  
• Document camera  
• Interactive Word Wall symbols (one set per group of four)  
• Equity sticks  
• Science Talk Norms anchor chart (from Lesson 8)  
• Preparing for a Science Talk note-catcher (page 11 of the Animal Defenses research journal; from Lesson 8; one per student and one to display)  
• Preparing for a Science Talk Notes and Goals sheet (page 12 of the Animal Defenses research journal; one per student and one to display)  
• Participating in a Science Talk anchor chart (new; teacher-created)  
• Sticky notes (three to four per student)  
• Science Talk Criteria checklist (one for teacher reference)  
• Millipede Defense Mechanisms: KWL chart (page 13 in Animal Defenses research journal; one per student and one to display) |
A. Engaging the Reader: Connecting Key Vocabulary: Interactive Word Wall (10 minutes)

- Tell students they will use the Vocabulary word cards (from Lesson 8) they used in the previous lesson for Quiz-Quiz-Trade to participate in an activity called Interactive Word Wall. Explain further that the purpose of this activity is to help them make connections between the meanings of vocabulary words related to animal defense mechanisms.

- Place students in groups of four. Post or display and review the Interactive Word Wall directions:
  1. Place vocabulary word cards and arrows face-up in the middle of your group space.
  2. Take turns selecting one word to connect with another.
  3. Explain your connection to the group each time you take a turn.
  4. It is fine to move words or connect more than one word with another.
  5. Continue taking turns until you have connected every word to some other word.

- Briefly model for students how to make and explain a connection. Use the document camera (or magnets on the board) to model something like the following: “I am going to connect the word alert to the word escape, because if an animal is alert and hears a predator coming, it has time to escape.” Emphasize each step of the directions, and be sure that students understand that words can be connected in multiple ways.

- Distribute a set of Vocabulary word cards with Interactive Word Wall symbols to each group. Give groups 10 minutes to make connections. If they finish early, encourage them to start again and try to make new connections with their words.

- Ask each group to share one connection they made between words and why. Ask: “Why is it important for readers to make connections between words? How does it help us to become better readers?” Have groups discuss briefly. Then use equity sticks to call out a few students to share out.

- Collect Vocabulary word cards.

Meeting Students’ Needs

- For ELLs and other students needing additional support, consider predetermining the words and giving students time to discuss with a partner what they will say during a protocol-based conversation.

- Consider underlining or drawing a box around the vocabulary words in the learning targets to help struggling readers focus on those key words.
### Opening (continued)

#### B. Reviewing Learning Targets (5 minutes)

- Ask students to read the first learning target: “I can effectively participate in a Science Talk about animal defense mechanisms.” Focus students’ attentions on the phrase *effectively participate*. Ask students what it looks/sounds like to effectively participate with peers, listening for ideas such as: “Wait my turn to speak, so I am heard; don’t shout/speak too loudly; make sure everyone gets a turn to speak; no one person does most/all of the speaking; use information from text to support my ideas,” etc. Add students’ ideas to a *Science Talk Norms anchor chart*.

- Ask the students to read the first two supporting targets for today’s lesson: “I can ask questions so I am clear about what is being discussed.” and “I can ask questions on the topic being discussed.” Ask students what they think is the difference between these two targets. Listen for things like: “The first one is asking me to make sure I’m understanding what is being talk about by everyone during the Science Talk,” and “The second one is asking me to ask questions during the Science Talk, not just listen to other people talk.”
A. Preparing for a Science Talk (10 minutes)

- Remind students that a Science Talk is a discussion about big or important questions scientists have. While scientists discuss these big questions with one another, it is important for them to create a set of rules, or norms, that they will all follow so everyone's ideas can be heard and considered.

- Explain that before they can participate in the Science Talk today, they need to spend a few minutes reviewing the notes they made on their Preparing for a Science Talk note-catcher in Lesson 8. Give the students 3–5 minutes to review their notes for the Science Talk on page 12 of their research journals.

Meeting Students' Needs

- Science Talks help your ELLs process their thinking verbally, and learn from the thoughts of others.
- When reviewing the graphic organizers or recording forms, consider using a document camera to display the document for students who struggle with auditory processing.
- Encourage students to agree or disagree using thumbs-ups or thumbs-down. This can help students who struggle with language to process what their peers are saying.
- Consider drawing visuals next to each norm, giving ELLs another access point to understand the text.
### B. Conducting the Science Talk—Round 1 (15 minutes)

- Gather students on the rug. Remind them to bring their research journals with the **Preparing for a Science Talk note-catcher** and the **Preparing for a Science Talk Notes and Goals sheet** on pages 9 and 10. Display the **Participating in a Science Talk anchor chart** for students to see. Briefly review the anchor chart with students, and answer any clarifying questions.

- Explain that they today they will talk to each other about what they have been learning. Explain that this will not be the same kind of conversation that they might have on the playground or in other times during the day. Ask:
  * “Why might this conversation be different?”

- Listen for responses like:
  - “We’ll have to be more formal with each other and talk to each other like we would talk to an adult.”

- Ask the students to find the second section of their note-catcher labeled “My Science Talk Notes: Ideas and Questions.” Explain that this is where they will take notes during the Science Talk if they think of an idea or question they would like to share while waiting their turn to speak.

- Distribute several **sticky notes** to each student in the outside circle to record observations of Science Talk Norms. Be explicit with students that they are recording evidence of the norms of the whole group, not individual students and that these comments should be kind, helpful, and specific, so that the group can improve their performance in future class discussions.

- Briefly review the Science Talk Norms (from Lesson 8) and explain that their feedback should be based on these norms.

- Provide a brief example of what students should write down on their sticky notes by saying something like: “Pay attention to the group you are observing and notice how they use the norms of a Science Talk. You might write down something on your sticky note like: ‘Most students used evidence from *Animal Behavior: Animal Defenses* to support their thinking.’”

- Direct students to begin the Science Talk. Use the **Science Talk Criteria checklist** during this time to monitor student progression toward the learning targets. Quickly redirect and support students as needed, but avoid leading the conversation. Remind students that their questions and comments should be directed to one another, not the teacher.

### Meeting Students’ Needs

- Providing visual models of academic vocabulary supports language development and comprehension.

- Provide sentence frames for students to use as they participate in the Science Talk: “When I saw/heard _____, I learned _____” and “I wonder ____.”
### C. Conducting the Science Talk—Round 2 (15 minutes)

- Ask students to switch places with their partners so that those students who were sitting in the outside circle are now sitting in the inside circle.
- Review the Science Talk Norms and invite students to help you give feedback to the exiting group. Consider using the following prompt:
  * What are two things this group did really well?
  * What is one thing they could work on next time?
- Discuss strategies that might help the next group be more successful in this area.
- Distribute several sticky notes to each student in the outside circle in order to record observations of Science Talk Norms.
- As you circulate and note which students are speaking and what ideas are being shared, make sure to record these observations on sticky notes. Refer back to these in future lessons.
- Direct students to begin the Science Talk. Use the Science Talk Criteria checklist during this time to monitor student progression toward the learning targets. Quickly redirect and support students as needed, but avoid leading the conversation. Remind students that their questions and comments should be directed to one another, not the teacher. Briefly review the Science Talk Norms anchor chart.

### Meeting Students’ Needs

- Provide sentence frames for students to use as they participate in the Science Talk: “When I saw/heard _____, I learned _____” and “I wonder ____.”
### Closing and Assessment

**A. Debrief and Review Homework (5 minutes)**

- Read aloud the learning target: “I can effectively participate in a Science Talk about animal defense mechanisms.” Ask students to use thumbs-up if they met the target or thumbs-down if they still need to work on the target. Cold call using the equity sticks on several students to share why they gave themselves a thumbs-up or thumbs-down, prompting them to refer to the norms they determined for the Science Talk Norms anchor chart as a way to support their self-assessment.

- Review the homework assignment for tonight. Explain to students that they will now be shifting their research on animal defense mechanisms and focus specifically on the millipede’s defense mechanisms.

- Invite students to open to page 13 of their research journals to the **Millipede Defense Mechanisms: KWL chart.** Explain that they will be using this chart like they used the Animal Defense Mechanisms: KWL chart.

- Tell students that for homework, they should start thinking about what they already know about the millipede and what they want to know about it, noting their thinking in the K and W columns of the chart.

### Meeting Students’ Needs

- Allowing students to work in small groups provides the opportunity for all students to share their voices.

### Homework

- Complete the K and W columns of the Millipede Defense Mechanisms: KWL Chart on page 13 of your research journal.

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**Note:** Students will need specific feedback from this Science Talk in order to reflect on and set goals before they participate in the next Science Talk in Lesson 13. Write feedback on the teacher feedback sections on their Preparing for a Science Talk note-catcher.

Focus the feedback on the learning targets that was emphasized in this lesson: “I can ask questions so I am clear about what is being discussed” and “I can ask questions on the topic being discussed.” Also give suggestions to any students who may need more coaching in order to follow the Science Talk norms created in this lesson. Keep feedback focused, brief, and encouraging. For example: “I noticed that you recorded three pieces of evidence from the text on your form. Great! During next Science Talk, be sure to mention the text during the class the discussion.” Or “I noticed you were able to use evidence from the text when sharing your ideas during the Science Talk. Good work! One thing you should focus on for our next Science Talk is waiting your turn to speak.”
Teacher Directions: Write these directions on a piece of chart paper or on the board prior to beginning this lesson with students.

Interactive Word Wall Directions
1. Place vocabulary word cards and arrows face up in the middle of your group space.
2. Take turns selecting one word to connect with another.
3. Explain your connection to the group each time you take a turn.
4. It is fine to move words or connect more than one word with another.
5. Continue taking turns until you have connected every word to some other word.
Participating in a Science Talk
Anchor Chart
(for Teacher Reference)

- Discussing a question you are researching with your peers can help you understand what you have read in your research of the topic.
- Think about the question: How do animals’ bodies and behaviors help them survive?
- Revisit the text and gather evidence to support your thinking.
- Find a Science Talk Partner and number off, 1 and 2.
- Gather in two circles on the floor with your Preparing for a Science Talk note-catcher. Partner 1 sits in the inside circle facing in. Partner 2 sits directly behind their partner.

- Inside circle:
  - Take turns sharing your thinking about the question. Be sure to reference the evidence you gathered from the texts you read and recorded in your note-catcher.
  - As you listen to the conversation, record any new ideas or questions you would like to share with the group as you wait to speak.
  - Respond to others and build on their ideas.
  - Follow Science Talk Norms.

- Outside circle:
  - Observe the inside group silently, looking for evidence of how they are following the Science Talk Norms.
  - Record your observations on sticky notes. Be specific about what you see.

- Outside partner gives feedback to the inside partner about how well the group followed the Science Talk Norms.
Teacher directions: List each student’s name. Add any norms your class has agreed on. In the columns, note how well each student demonstrates the norms and meets the learning targets listed in the heading columns.

**Learning Target:** I can effectively participate in a Science Talk about animal defense mechanisms.

b. I can ask questions so I am clear about what is being discussed.

c. I can ask questions on the topic being discussed.

d. I can follow our class norms when I participate in a conversation.

<table>
<thead>
<tr>
<th>Student name</th>
<th>Prepares with evidence</th>
<th>Norms</th>
<th>Asks questions related to topic</th>
<th>Responds to and builds on other’s ideas/questions</th>
<th>Teacher comments</th>
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Grade 4: Module 2B: Unit 1: Lesson 10
Determining Main Idea and Summarizing:
Reading Closely about Millipedes
## Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can paraphrase portions of a text that is read aloud to me. (SL.4.2)
- I can determine the main idea using specific details from the text. (RI.4.2)
- I can summarize informational text. (RI.4.2)

## Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can determine the main idea of a section of <em>Venom</em>.</td>
<td>• Listening Closely note-catcher (page 14 of Animal Defenses Research Journal)</td>
</tr>
<tr>
<td>• I can summarize a section of <em>Venom</em> using the main idea and supporting details found in the text.</td>
<td>• Determining the Main Idea note-catcher (page 15 of Animal Defenses Research Journal)</td>
</tr>
</tbody>
</table>
## Agenda

<table>
<thead>
<tr>
<th>Opening</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Opening</td>
<td>• This lesson marks a transition in Unit 1 from a general overview of animal defense mechanisms to a deeper study of millipede defense mechanisms. This study of the millipede is designed to be a model of what students will later do when researching in their animal expert groups.</td>
</tr>
<tr>
<td>A. Reviewing Learning Targets (5 minutes)</td>
<td>• The opening of this lesson is slightly different from prior lessons. Students begin by reviewing the learning targets instead of with an “engaging the reader” activity. This brings awareness to students about the shift in their focus of study from general defense mechanisms to those of the millipede.</td>
</tr>
<tr>
<td>B. Engaging the Reader: Read-aloud of <em>Venom</em> (10 minutes)</td>
<td>• The Determining the Main Idea note-catcher supplied in the supporting materials of this lesson has an intentional strike-through of the first bullet point. You may wish to use this detail to model choosing details that are from the text but don’t directly support the main idea.</td>
</tr>
<tr>
<td>2. Work Time</td>
<td>• This lesson builds on previous lessons focused on determining the main idea by teaching students to write a summary of the text. In this lesson, the summary is written with students. Students practice summarizing again in Lesson 12, and are assessed on this skill in the End of Unit 1 Assessment in Lesson 14. They continue to practice summarizing in Unit 2.</td>
</tr>
<tr>
<td>A. Reading an Informational Text: Determining the Main Idea and Identifying Supporting Details (20 minutes)</td>
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<tr>
<td>B. Guided Practice: Writing a Summary (15 minutes)</td>
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<tr>
<td>3. Closing and Assessment</td>
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<tr>
<td>A. Exit Ticket: KWL: Millipede Defense Mechanisms (10 minutes)</td>
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<tr>
<td>4. Homework</td>
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<tr>
<td>A. Continue your independent reading.</td>
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</tbody>
</table>
### Lesson Vocabulary

summarize, index, source; exoskeleton, toxin, ooze (15)

### Materials

- Equity sticks
- Document camera
- *Venom* (book for teacher read-aloud, page 15)
- Listening Closely note-catcher (page 14 of Animal Defenses research journal; one per student and one to display)
- Listening Closely note-catcher (completed, for teacher reference)
- Animal Defenses research journals (from Lesson 1; one per student)
- Copy of Page 15 of *Venom*, “They Have Legs and They Know How to Use Them” (one per student)
- Determining the Main Idea note-catcher (page 15 of Animal Defenses research journal; one per student and one to display)
- Determining the Main Idea note-catcher (completed, for teacher reference)
- Summarizing Informational Text anchor chart (new; co-created with students during Work Time Part B)
- Millipede Defense Mechanisms: KWL chart (page 13 Animal Research Journal; from Lesson 9; one per student)
## Opening

### A. Reviewing Learning Targets (5 minutes)
- Remind students that they have completed the first go-through of the Animal Defenses research journal, researching and collecting information about general animal defense mechanisms. They now will continue learning about animal defense mechanisms and research the millipede. Explain that the process will be the same—they will listen to texts about the millipede, read and reread for main idea and vocabulary. Tell students this work is leading up to their own research of different animals in expert groups to prepare for the final performance task.
- Use **equity sticks** to call on students to read the learning targets:
  - “I can determine the main idea of a section of *Venom*.”
  - “I can summarize a section of *Venom* using the main idea and supporting details found in the text.”
- Remind students that the first and third targets should be familiar to them. Focus on the second target by circling the word **summarize** and asking:
  - “What does it mean to summarize?”
- Listen for responses like: “It’s when you tell the big ideas of a text.” Clarify as needed. Explain to students that they will be using their understanding of how to determine the main idea and identify supporting details to summarize a text about millipedes.

### Meeting Students’ Needs
- Discussing and clarifying the language of learning targets helps build academic vocabulary.
### Opening (continued)

**B. Engaging the Reader: Read-aloud of *Venom* (10 minutes)**

- Using a **document camera**, display the cover of *Venom* so all students can see. Open to pages 74 and 75 and ask:
  * “What did we learn about animal defense mechanisms when we last read aloud from *Venom*?”

- Listen for responses like: “Bees use stingers to protect themselves.” Validate responses and explain to students that they will be listening to another section of *Venom* today. Tell students they will then use this text to determine the main idea and summarize later in the lesson.

- Inform students that they will start their study of the millipede and its defense mechanisms. Model using the index in *Venom* to find information about the millipede. Point out that the index is in the back of the book, is organized alphabetically, and that the numbers indicate the page number with information about the topic it is next to. Also point out the distinction between “millipede” and “yellow spotted millipede”—note for students that in this case, there is a specific kind of millipede that is mentioned in this book in addition to general information about millipedes. This is important to note for students because when they study their expert group animals, some groups will be studying specific kinds of butterflies, octopuses, or armadillos, so they will need to recognize the distinction between the general animal group and the specific species in the index.

- Display the blank **Listening Closely note-catcher** and invite students to open to the next one on page 14 in their **Animal Defenses research journals**. Ask:
  * “How do we use this graphic organizer to help us understand a text read aloud?”

- Use equity sticks to call on students. Listen for responses like: “We record the animal protects itself in the left column and explain how that helps the animal survive in the right column. We write a gist statement at the bottom.”

- Remind students that they will listen to a new part of *Venom* read aloud several times. Remind them that the first time they hear it read aloud, they should simply listen to what is being read. The second time, they should begin to fill in the table.

- Read aloud page 15 as students read along.

- Invite students to turn and talk with a neighbor, sharing one interesting thing they heard during the read-aloud. Use equity sticks to call on two students to share what their partners found interesting.

- Tell students that they will now hear page 15 read aloud a second time and should now record notes in the note-catcher as you read aloud.
### Opening (continued)

- Read aloud page 15 in *Venom* again, stopping briefly after each paragraph. If necessary during each short pause, remind students to fill in notes on their note-catchers.
- Invite students to turn and talk with a partner. Ask:
  - “What is an example of how millipedes protect themselves?” Listen for responses like: “Millipedes roll into tight balls.”
  - “How do those defense mechanisms help millipedes survive?” Listen for responses like: “Their exoskeleton makes it hard to hurt the millipede’s body when it’s curled into a ball.”
  - “What was the gist of this text?” Listen for responses like: “The main message of this text was how centipedes and millipedes protect themselves. Some are harmless and some are poisonous.”
- Point to the question below the table on the graphic organizer—“What is the gist of this section of *Venom*?” Invite students to jot down the gist of this part of the text on these lines. If necessary, prompt students by asking: “What is your initial sense of what this part of the text was mostly about?”
- Remind students they will have many more opportunities to read this book, and can read through it on their own during independent reading or in their free time during the school day if they wish.

### Meeting Students’ Needs

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<tr>
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<tbody>
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# A. Reading an Informational Text: Determining the Main Idea and Identifying Supporting Details (20 minutes)

- Distribute a **copy of page 15 of Venom**, “They Have Legs and They Know How to Use Them” to each student.
- Invite students to turn to page 15 of their research journals to the **Determining the Main Idea note-catcher**. Explain that they will now have a chance to work closely with the text they just listened to, to determine the main idea and find details that support the main idea of that page.
- Point out the “Source” box in the upper right-hand corner. Explain that whenever they are researching, they should record the source, or where the information is coming from, in their notes. Ask:
  * “What is the source we are using in this lesson? Where is our information coming from?”
- Listen for students to respond with: “Venom.” Prompt them to include the page number and author, and invite them to write it in the “Source” box on the note-catcher.
- Review determining the main idea by asking:
  * “How do we determine the main idea of a section of text?”
- Listen for students describing the process introduced in Lesson 3, saying things like: “We read the text paragraph by paragraph, and after each paragraph ask ourselves, ‘What is this text about?’ We revise our thinking about the main idea as we read.”
- Review identifying supporting details by asking:
  * “How do we identify details that support the main idea of a section of the text?”
- Listen for students describing the process discussed in Lesson 4, saying something like: “We reread the text paragraph by paragraph, thinking about the main idea and looking for facts or details that the author used to explain that idea.”
- Invite students to Think-Pair-Share and reread page 15 of Venom independently to determine the main idea of that page. Tell them to write the main idea in the appropriate box on their note-catcher.
- Once students have shared out whole group, invite students to Think-Pair-Share and reread page 15 of Venom independently to identify details that support the main idea. Tell them to write at least three supporting details in the appropriate box on their note-catcher.

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# Meeting Students’ Needs

- The teacher may offer selected shorter passages to specific groups based on the readiness and needs of the group. This provides an opportunity for students to read a complex text within the fourth-grade level span, but differentiates the length of the text, not the complexity.
- Graphic organizers and recording forms engage students more actively and provide the necessary scaffolding that is especially critical for learners with lower levels of language proficiency and/or learning. For students needing additional support, provide a partially filled-in graphic organizer.
- Provide ELLs with a sentence starter or frame to aid in language production. For example: *One idea that is repeated again and again is ...* or *A detail that supports the main idea of our section is ...*
- Some students may benefit from having key sections pre-highlighted in their texts. This will help them focus on small sections rather than scanning the whole text for answers.
### Work Time (continued)

- If necessary, model finding a detail that does not support the main idea by saying something like: “Here’s a detail about millipedes from Venom: (point to this sentence in the third paragraph on page 15 and write it on the note-catcher) ‘Millipedes, relatives of the centipedes, have 20 to 100 body segments, most with two pairs of legs each.’ That detail is about millipedes. Does it support the main idea of this page, though? The main idea is that centipedes and millipedes have many defense mechanisms. This detail is about what the millipede looks like, and not its defense mechanisms. So, I’m going to cross this out because, though it’s a detail, it’s not a detail that supports the main idea.”

### Meeting Students’ Needs

<table>
<thead>
<tr>
<th>B. Guided Practice: Writing a Summary (15 minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Explain to students that they will use their notes on the main idea and supporting details to write a short summary of page 15 of Venom.</td>
</tr>
<tr>
<td>• Invite students to Think-Pair-Share to discuss the following:</td>
</tr>
<tr>
<td>* “What is a summary?”</td>
</tr>
<tr>
<td>* “How might a summary be different from identifying the main idea or writing a gist statement?”</td>
</tr>
<tr>
<td>• Listen for responses like: “A summary tells the main points of a text,” “A summary is a longer than saying the main idea or a gist statement,” or “A summary includes the main idea and adds on a little bit more to it.”</td>
</tr>
<tr>
<td>• Ask students to quickly turn and talk about the summary writing they have already practiced this year. (Listen for them to remember the paragraphs they wrote from their research notes during Module 1 about the Iroquois.) Remind them as needed.</td>
</tr>
<tr>
<td>• On chart paper, begin a new Summarizing Informational Text anchor chart. Write the word summary on the chart and a simple definition such as “when you tell the main points of a text.” Tell students that writing a summary will help them to better understand the text they are reading.</td>
</tr>
<tr>
<td>• Invite students to look at the second page of their Determining the Main Idea note-catchers. Point out Reading and Writing Like a Researcher section. Have students read the prompt. Tell them that a good summary of text usually includes the main idea of the text and details that support the main idea. Add the following to the anchor chart in bullet points:</td>
</tr>
<tr>
<td>– What big idea is explained in this text?</td>
</tr>
</tbody>
</table>
| – What facts or examples in this text help us understand the big idea?
Work Time (continued)

- Invite students to think about when they have determined the big idea of the text they read today, and when they found facts or examples. Listen for students to notice that they did this in Work Time A.

- Tell students that they can use the notes they took in Work Time A to write a summary paragraph. Model how to write this information in paragraph form and display for students. (A possible summary for this text might be: “Centipedes and millipedes have many defense mechanisms. For example, the 12-inch-long rainforest centipede has claws called prehensors, which can deliver painful stings. The millipede has a tough exoskeleton and curls into a hard, protective ball when threatened. Some, like the yellow-spotted millipede, are poisonous and emit a toxin to repel predators. As humans we might find these features ‘creepy,’ but they keep centipedes and millipedes safe!”)

- Key points to attend to during the modeling:
  - Remind students of the structure of a good paragraph (topic sentence, details, and concluding sentence).
  - Tell students that they will need to include information from each column of their note-catcher to make it a good summary.
  - Model checking off notes on the note-catcher as you write the information in your sentences.

- On the Summarizing Informational Text anchor chart, record the following in your own or students’ words:
  - Good summary paragraphs have a topic sentence, details, and concluding sentence.
  - They explain the big idea and share facts and examples that help us understand the big idea.

- Tell students that they will have a chance to practice summarizing again later in the unit, with a different text.
### Closing and Assessment

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Exit Ticket: KWL: Millipede Defense Mechanisms (10 minutes)</td>
</tr>
<tr>
<td>• For an exit ticket, ask students to write the answers to any questions they had in the W column in the “I Learned” column, in the “Information” section. Include the name and page number of the text in the “Source” column. Add any new questions they have to the W column and write one new piece of information they learned from the text read in today’s lesson in the “I Learned” column.</td>
</tr>
<tr>
<td>• Collect students Animal Defenses Research Journals and look at students’ entries on page 13 as an exit ticket and formative assessment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Collect Animal Defenses research journals for formative assessment.</td>
</tr>
</tbody>
</table>

### Homework

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Continue your independent reading.</td>
</tr>
</tbody>
</table>
**Animal Defenses Research Journal:**
Millipede Defense Mechanisms
Listening Closely Note-catcher
(Completed for Teacher Reference)

**Source:** *Venom* page 15

**Directions:** Listen as *Venom* is read aloud. Use the table below to record your notes.

<table>
<thead>
<tr>
<th>Examples of How Millipedes Protect Themselves</th>
<th>How This Helps Millipedes Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Venom</em> page 15</td>
<td></td>
</tr>
<tr>
<td>• Have a tough exoskeleton</td>
<td>• Exoskeleton makes it hard for predators to hurt the millipede’s body</td>
</tr>
<tr>
<td>• Roll into a tight, hard ball</td>
<td>• Poison makes predator sick</td>
</tr>
<tr>
<td>• Some are poisonous</td>
<td></td>
</tr>
<tr>
<td>• Release an acid or liquid hydrogen cyanide to repel predators</td>
<td></td>
</tr>
<tr>
<td>• The poisons don’t hurt people</td>
<td></td>
</tr>
</tbody>
</table>

Other Facts about Centipedes and Millipedes

- **Centipedes are not insects**
- Centipedes and millipedes have many body segments and many legs
- Some millipede predators are ants and toads
- Black lemurs rub millipedes on themselves to use the poison to repel pests

Explain in your own words what this section of *Venom* was about:

The main message of this text was how centipedes and millipedes protect themselves. Some are harmless and some are poisonous.
Reread the text and identify the main idea for each section of the text.

<table>
<thead>
<tr>
<th>Main Idea:</th>
<th>Supporting Details:</th>
</tr>
</thead>
</table>
| Centipedes and millipedes have many defense mechanisms. | • The rainforest centipede has claws called prehensors that can deliver painful stings  
• “Millipedes have twenty to one hundred body segments, most with two pairs of legs each”  
• “They have a tough exoskeleton”  
• “Their main defense is to roll into a tight, hard ball.”  
• Yellow-spotted millipedes “emit acid or liquid hydrogen cyanide...to repel predators, such as ants or toads” |

Reading and Writing Like a Researcher:
Summarize page 15 of *Venom*. Use details from the text to support your explanation.

Centipedes and millipedes have many defense mechanisms. For example, the twelve-inch-long rainforest centipede has claws called prehensors, which can deliver painful stings. The millipede has a tough exoskeleton and curls into a hard, protective ball when threatened. Some, like the yellow-spotted millipede, are poisonous and emit a toxin to repel predators. As humans we might find these features “creepy,” but they keep centipedes and millipedes safe!
Teacher Directions: Write the following underneath on chart paper to create this anchor chart during Work Time Part B.

Summarizing Informational Text

- What big idea is explained in this text?
- What facts or examples in this text help us understand the big idea?

Good summary paragraphs have a topic sentence, details, and concluding sentence.

They explain the big idea and share facts and examples that help us understand the big idea.
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can explain what a text says using specific details from the text. (RI.4.1)
- I can make inferences using specific details from text. (RI.4.1)
- I can interpret information presented through charts or graphs. I can explain how that information helps me understand the text around it. (RI.4.7)
- I can determine the meaning of academic words or phrases in an informational text. (RI.4.4)
- I can determine the meaning of content words or phrases in an informational text. (RI.4.4)

### Supporting Learning Target

<table>
<thead>
<tr>
<th>Supporting Learning Target</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can make inferences based on information from pictures and text in a section of <em>Animal Behavior: Animal Defenses</em>, “Poisonous Prey”.</td>
<td>• Listening Closely note-catcher (page 16 of Animal Defenses research journal)</td>
</tr>
<tr>
<td>• I can support my inferences with details and examples from pictures and texts in a section of <em>Animal Behaviors: Animal Defenses</em>, “Poisonous Prey”.</td>
<td>• “Poisonous Prey” note-catcher (pages 17-23 Animal Defenses research journal)</td>
</tr>
<tr>
<td>• I can find the meanings of unfamiliar words to help me better understand a section of <em>Animal Behaviors: Animal Defenses</em>, “Poisonous Prey”.</td>
<td></td>
</tr>
</tbody>
</table>
Open the document and proceed with the instructions.
<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>index</td>
<td>• <em>Animal Behavior: Animal Defenses</em> (book; one per student and one for display; “Poisonous Prey,” pages 56–58)</td>
</tr>
<tr>
<td>predator (56), prey, retch, entrap, oozes, affect, toxic (57), excrete</td>
<td>• Document camera</td>
</tr>
<tr>
<td></td>
<td>• Listening Closely note-catcher (page 16 of Animal Defenses research journal; one per student and one to display)</td>
</tr>
<tr>
<td></td>
<td>• Listening Closely note-catcher (completed, for teacher reference)</td>
</tr>
<tr>
<td></td>
<td>• Animal Defenses research journals (from Lesson 1)</td>
</tr>
<tr>
<td></td>
<td>• Equity sticks</td>
</tr>
<tr>
<td></td>
<td>• Close Readers Do These Things anchor chart (from Module 1, Unit 1, Lesson 3; or recreated in Lesson 2 of this module)</td>
</tr>
<tr>
<td></td>
<td>• “Poisonous Prey” note-catcher (pages 17-23 of Animal Defenses research journal; one per student and one to display)</td>
</tr>
<tr>
<td></td>
<td>• “Poisonous Prey” Close Reading Guide (for teacher reference)</td>
</tr>
<tr>
<td>Opening</td>
<td>Meeting Students’ Needs</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>A. Engaging the Reader: Read-aloud of “Poisonous Prey” (10 minutes)</strong></td>
<td>• Whole class discussions encourage respectful and active listening, as well as social construction of knowledge.</td>
</tr>
<tr>
<td>• Remind students that they’ve been learning about millipedes’ defense mechanisms. Invite students to take out <em>Animal Behavior: Animal Defenses</em>. Remind students that this book is another source they can use for their research. Ask:</td>
<td>• Hearing a complex text read slowly, fluently, and without interruption or explanation promotes fluency for students; they are hearing a strong reader read the text aloud with accuracy and expression, and are simultaneously looking at and thinking about the words on the printed page. Set clear expectations that students read along silently in their heads as you read the text aloud.</td>
</tr>
<tr>
<td>* “Where can we find more information about millipedes in this book?”</td>
<td></td>
</tr>
<tr>
<td>• Give students a couple minutes to flip through their books, looking for more information.</td>
<td></td>
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<tr>
<td>• Invite students to share pages where they found some more information about millipedes. As students share, ask:</td>
<td></td>
</tr>
<tr>
<td>* “How did you find this part of the text that had more information about millipedes?”</td>
<td></td>
</tr>
<tr>
<td>• Listen for students to point out using the table of contents or the index. If students do not point out using the index, model by saying something like: “We could use the index, which is a list of topics in the back of a book with page numbers showing the page where that topic appears. It’s in alphabetical order, which makes it easier to find the topic you might be looking for. If we want to find out more about millipedes, we would flip to the index and go to the M section. These pages all have information about millipedes. Let’s flip to page 53, since that’s the first page listed. We’ll skim the page, looking for information about the millipede [model scanning]. This page doesn’t have much information, so I’ll go back to the index to see what’s next. Pages 56–57 have some more information, according to the index. Those will be the pages we’ll focus on.”</td>
<td></td>
</tr>
<tr>
<td>• Tell students that they will be listening to a section from <em>Animal Behavior: Animal Defenses</em>. Tell students they will then use this text to determine the main idea later in the lesson.</td>
<td></td>
</tr>
<tr>
<td>• Using a <strong>document camera</strong>, display a blank <strong>Listening Closely note-catcher</strong> and invite students to open to the next one on page 16 in their <em>Animal Defenses research journals</em>. Ask:</td>
<td></td>
</tr>
<tr>
<td>* “How do we use this graphic organizer to help us understand a text read aloud?”</td>
<td></td>
</tr>
<tr>
<td>• Use equity sticks to call on students. Listen for responses like: “We record facts about animals in the left-hand column, how the animal protects itself in the middle column, and explain how that helps the animal survive in the right-hand column. We write a gist statement at the bottom.”</td>
<td></td>
</tr>
<tr>
<td>• Remind students that they will listen to a new part of <em>Animal Behavior: Animal Defenses</em> read aloud several times. The first time they hear it read aloud, they should simply listen. The second time, they should begin to fill in the table.</td>
<td></td>
</tr>
<tr>
<td>• Tell students you will read the section “Poisonous Prey” on pages 56–58 aloud, and remind them that they should just listen to what is being read. Read aloud pages 56–58.</td>
<td></td>
</tr>
<tr>
<td>Opening (continued)</td>
<td>Meeting Students’ Needs</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>• Invite students to turn and talk with a neighbor, sharing one interesting thing they heard during the read-aloud. Use <strong>equity sticks</strong> to call on two students to share what their partners found interesting.</td>
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</tr>
<tr>
<td>• Explain to students that they will now hear pages 56–58 read aloud a second time. Tell students they should now record notes in the note-catcher as you read aloud.</td>
<td></td>
</tr>
<tr>
<td>• Read aloud “Poisonous Prey,” stopping briefly after each paragraph. If necessary during each short pause, remind students to fill in notes on their note-catchers.</td>
<td></td>
</tr>
<tr>
<td>• Invite students to turn and talk with a partner. Ask:</td>
<td></td>
</tr>
<tr>
<td>* “What is one fact you wrote down about millipedes?”</td>
<td></td>
</tr>
<tr>
<td>• Listen for responses like: “Pill millipedes are poisonous.”</td>
<td></td>
</tr>
<tr>
<td>* “What is an example of how millipedes protect themselves?”</td>
<td></td>
</tr>
<tr>
<td>• Listen for responses like: “They ooze sticky droplets when attacked.”</td>
<td></td>
</tr>
<tr>
<td>* “How do those defense mechanisms help millipedes survive?”</td>
<td></td>
</tr>
<tr>
<td>• Listen for responses like: “The drops make the predator sticky which slows it down and lets the millipede escape.”</td>
<td></td>
</tr>
<tr>
<td>• Use equity sticks to call on a student to share his or her partner’s response.</td>
<td></td>
</tr>
<tr>
<td>• Remind students they will have many more opportunities to read this book, and can read through it on their own during independent reading or in their free time during the school day if they wish.</td>
<td></td>
</tr>
</tbody>
</table>
B. Reviewing Learning Targets (5 minutes)

- Use equity sticks to call on students to read the learning targets:
  * I can make inferences based on information from pictures and text in a section of Animal Behavior: Animal Defenses, “Poisonous Prey”.
  * I can support my inferences with details and examples from pictures and texts in a section of Animal Behaviors: Animal Defenses, “Poisonous Prey”.
  * I can find the meanings of unfamiliar words to help me better understand a section of Animal Behaviors: Animal Defenses, “Poisonous Prey”.
- Ask students to Think-Pair-Share on the following question:
  * “What does it mean to make an inference?”
- Listen for responses like: “Making an inference is when a reader thinks about something an author isn’t explicitly saying in the text.”
  * “What are some strategies you have been using to determine the meaning of unfamiliar words?”
- Listen for responses like: “I reread the text and infer.”

Meeting Students’ Needs

- Discussing and clarifying the language of learning targets helps build academic vocabulary.
A. Close Reading of “Poisonous Prey”: Rereading for the Gist (10 minutes)

- Explain to students that they will be rereading “Poisonous Prey” from Animal Behavior: Animal Defenses several times over the next two lessons. Tell students they will be reading the text closely in order to learn more about animal defense mechanism.
- Display Close Readers Do These Things anchor chart and remind students that they will be doing all of these things to closely read this text:
  - Read small chunks of text slowly and think about the gist.
  - Reread each passage one sentence at a time.
  - Underline things that you understand or know about.
  - Circle or underline words that you do not know.
  - Talk with your partners about all of your good ideas.
  - State the gist or message of the paragraph in the margin.
  - Listen to the questions.
  - Go back to the text in order to find answers to questions.
  - Talk with your partners about the answers you find.
- Invite students to find the “Poisonous Prey” note-catcher on page 15 of their research journal. Tell them that they will be using this note-catcher to help them think and take notes about this section of Animal Behavior: Animal Defenses.
- Use equity sticks to call on a student to read the focus question at the top of the note-catcher, to keep in mind as they work:
  * “How do animals use poison to survive?”
- Point out the bullet points about gist on the Close Readers Do These Things anchor chart. Invite students to reread “Poisonous Prey” for gist, writing their gist statements in the first box of the note-catcher. Give students 5 minutes to do so independently. Circulate and support as needed. If necessary, prompt students by asking: “What is this section mostly about?”
- After 5 minutes, bring students back together. Ask:
Work Time (continued)

* “What was the gist of this text?”
* Listen for responses like: “This section was about how some animals use poison to protect themselves.”

**B. Close Reading of “Poisonous Prey”: How Do Animals Use Poison to Survive? (30 minutes)**

* Remind students that close readers reread the texts they are analyzing paragraph by paragraph, sentence by sentence. Explain to students that they will now reread this section closely to think carefully about the focus question:
  * “How do animals use poison to survive?”
* Tell students they will be doing this by rereading paragraphs on their own and with a partner and discussing the text as they read. Using the “Poisonous Prey” Close Reading guide, guide students through rereading the text, inviting them to Think-Pair-Share and discuss the prompts as necessary. Stop students at the tenth row with the prompt: “Reread the fifth paragraph on page 56 (continued on page 57) silently. Then use details from the text to answer the question on the right” Tell students that they will continue rereading the rest of the text in the next lesson.

**Meeting Students’ Needs**

* Some students may benefit from having key sections pre-highlighted in their texts. This will help them focus on small sections rather than scanning the whole text for answers.
### Closing and Assessment

<table>
<thead>
<tr>
<th><strong>A. Share and Debrief (5 minutes)</strong></th>
<th><strong>Meeting Students’ Needs</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Bring students back together. Invite students to use the Fist to Five checking for understanding technique, showing how confident they are in answering the focus question for this section of the text, showing a fist for completely unsure of how animals use poison, or a five, meaning they can share several ways animals use poison to survive. Be sure to check in with students showing a fist, one, or two fingers during the close read in Lesson 12.</td>
<td></td>
</tr>
<tr>
<td>• Using the Back-to-Back, Face-to-Face protocol, ask:</td>
<td></td>
</tr>
<tr>
<td>* “What is one way animals use poison to survive?” Listen for responses like: “Poison can make an animal’s enemy sick.”</td>
<td></td>
</tr>
<tr>
<td>* “How is this process helping you to better understand this text?” Listen for responses like: “By rereading, I can think carefully about the meaning of words I don’t know, like ‘retch.’”</td>
<td></td>
</tr>
<tr>
<td>• Explain to students that they will continue rereading “Poisonous Prey” closely in the next lesson.</td>
<td></td>
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</tbody>
</table>

### Homework

<table>
<thead>
<tr>
<th><strong>Meeting Students’ Needs</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>“Poisonous Prey” Vocabulary: Reread “Poisonous Prey.” While you read, write down words that you do not know the meaning of. Choose one word you wrote down and try to figure out the definition of it. Write down the definition and how you figured out what the word meant as well.</strong></td>
</tr>
</tbody>
</table>
Animal Defenses Research Journal:  
Millipede Defense Mechanisms  
Listening Closely Note-catcher  
(Completed for Teacher Reference)


Directions: Listen as the text is read aloud. Use the table below to record your notes.

<table>
<thead>
<tr>
<th>Examples of How Millipedes Protect Themselves</th>
<th>How This Helps Millipedes Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td>• oozes sticky droplets when attacked</td>
<td>• This traps its attackers so it can get away.</td>
</tr>
<tr>
<td>• droplets are poison</td>
<td>• This protects the millipede from future attacks.</td>
</tr>
</tbody>
</table>

Other Interesting Things:

• Pill millipedes are poisonous
• Poison dart frogs are blue.
Note to Teachers: Rows 1-7 are completed in Lesson 11 and Rows 8-17 in Lesson 12.

Source: Animal Behavior: Animal Defenses—“Poisonous Prey” page 56–58

Focus question: How do animals use poison to survive?

1. What is the gist of this section of the text?
   Ask: What is this text mostly about?
   Listen for: This text is about how animals use poison to survive.

2. Read Paragraph 1 aloud to a partner.
   Then use the glossary in the back of Animal Behavior: Animal Defenses to answer the questions on the right.
   
   Ask: What does the word “predator” mean?
   Listen for: an animal that eats other animals

   Ask: What does the word “prey” mean?
   Listen for: “an animal that is eaten by other animals”

   Ask: Who is usually poisonous, the predator or the prey?
   Listen for “the prey”

   Additional Prompts:
   Ask students how they know this, since it is not directly stated in the text. Students might think it is the predator since that is the animal that eats other animals, thinking it uses poison to kill its prey. Clarify as necessary.
3. Now, reread the first paragraph on page 56 silently. Then use details from the text to answer the questions on the right.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ask:</strong> What is a poisonous animal? How is a poisonous animal different from a venomous animal?</td>
<td>Listen for: A poisonous animal has poison in its body. It’s different from a venomous animal because venomous animals inject their poison into its victim. A predator comes in contact with the poison of a poisonous animal if it touches or eats the animal. Note: This is a subtle distinction. You may also refer to page 4 of Venom to clarify this for students.</td>
</tr>
<tr>
<td><strong>Ask:</strong> What is the purpose of this paragraph? What sentence in the text makes you think so?</td>
<td>Listen for: The purpose of this paragraph is to tell the reader what a poisonous animal is and to introduce the topic of the section. “A poisonous animal has poison in its body.” Note: This question appears several times throughout this note-catcher. In each case, there are other sentences that students may choose that help them understand the purpose of the paragraph. Guide students to choose the first sentence in each paragraph as the sentence that best shows the purpose of the paragraph. This will help them understand that topic sentences, which are usually the first sentence of a paragraph, can help them to determine the main idea of a paragraph. This is debriefed and students should draw this conclusion about expository paragraph structure at the end of this process.</td>
</tr>
</tbody>
</table>
### 4. Take turns reading the second and third paragraphs on page 56 to your partner. Then, working together, use details from the text to answer the questions on the right.

| Ask: The text says, “If the bird swallows the monarch, it regrets it.” What do you think “regrets” means? |
| Listen for: “When you wish you didn’t do something” |
| Ask: What line in the text helps you infer the meaning of this word? |
| Listen for: “The next sentence where it says the bird gets sick and throws up and then it remembers this lesson.” |

### 5. Look carefully at the following quote: “Scientists have found that the mere sight of a monarch can cause these ‘educated’ birds to gag and retch, as if they were about to be sick.” (page 56) Together, use this quote to answer the questions on the right.

| Ask: What do you think “retch” means? What words in the text make you think so? |
| Listen for: “throw up,” or “gag,” or “make the bird feel sick and throw up” |
| Ask: Why is the word educated in quotation marks? |
| Listen for: “The bird is learns about monarchs and their poison; birds can’t really be educated because they don’t go to school, so it’s in quotation marks because of that” |
| Ask: What does an “educated” bird know? |
| Listen for: it knows not to eat a monarch |
| Ask: How does poison help the monarch to survive? |
| Listen for: “It makes its predator sick and the predator learns to avoid it” |
6. Reread the focus question. Using evidence from the text, write one way animals use poison to survive in the box on the right. Write the answer to this question with your red pencil.

<table>
<thead>
<tr>
<th>Possible answer:</th>
</tr>
</thead>
<tbody>
<tr>
<td>One way animals use poison to survive is to make their enemies sick.</td>
</tr>
<tr>
<td>I think this because the monarch butterfly makes its enemies throw up and the enemy learns to stay away from it.</td>
</tr>
</tbody>
</table>
7. **Listen as your teacher reads the fourth paragraph on page 56 aloud. Your teacher will help you to choose the right strategy to use in answering the questions on the right.**

| Ask: What familiar word do you recognize in “entrap”?  
Listen for: “trap” |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: Using prefixes and suffixes to determine the meaning of unknown words is discussed in depth at the end of Lesson 12.</td>
</tr>
</tbody>
</table>

| Ask: What do you think “entrap” means?  
Listen for: “trick or capture” |
|---|
| Ask: What do you think “oozes” means? What words in the text make you think so?  
Listen for: “to flow or leak slowly” or “produce” |

| Ask: What do you think “affect” means? What words in the text make you think so? How is this different from the meaning of the word “effect”? Use a dictionary to help you figure out the difference.  
Listen for: “to change” or “paralyzed” |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompt students to notice: “affect” is a verb, “effect” is a noun</td>
</tr>
</tbody>
</table>

| Ask: What is the purpose of this paragraph? What sentence in the text makes you think so?  
Listen for: “This paragraph gives examples about how animals use poison to trap their enemies. ‘Many poisonous animals produce foul fluids that cling to the predator or entrap it.’” |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: Guide students to identify the first sentence of the paragraph.</td>
</tr>
</tbody>
</table>
### Grade 4: Module 2B: Unit 1: Lesson 11


*(For Teacher Reference)*

8. Using evidence from the text, sketch what the pill millipede does when attacked by a predator.

<table>
<thead>
<tr>
<th><strong>Look for:</strong> Sketches should show the droplets oozing from the millipede and sticking to its predator.</th>
</tr>
</thead>
</table>

9. Reread the focusing question. Using evidence from the text, write another way animals use poison to survive in the box on the right. Write the answer to this question with your red pencil.

<table>
<thead>
<tr>
<th><strong>Possible Answer:</strong> Another way animals use poison to survive is to trap their enemies. I think this because the pill millipede traps its predator with sticky droplets that it oozes from its body.</th>
</tr>
</thead>
</table>

**STOP HERE: Continue with the questions below in Lesson 12.**

10. Reread the fifth paragraph on page 56 (continued on page 57) silently. Then use details from the text to answer the question on the right.

<table>
<thead>
<tr>
<th><strong>Ask:</strong> What is the purpose of this paragraph? <strong>Listen for:</strong> This paragraph gives examples of how animals use poison to kill their enemies.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Ask:</strong> What sentence in the text makes you think so? <strong>Listen for:</strong> “Some animals’ poison can kill predators.” <strong>Note:</strong> Guide students to identify the first sentence of the paragraph, though other sentences may help them figure out the purpose.</th>
</tr>
</thead>
</table>
11. Read the second paragraph on page 57 to a partner. Look carefully at the following quote and use it to answer the questions on the right:

“Poison dart frogs (also called poison arrow frogs), which live in Central and South America, excrete a poisonous, foul-tasting fluid from their skin when threatened.” (page 57)

Ask: What is another name for “poison dart frogs”? How do you know?
Listen for: “poison arrow frogs; it’s in parentheses after poison dart frogs on page 57”

What do you think “toxic” means? What words in the text make you think so?
Listen for: “deadly or poisonous”; “the words poison and kill”

Ask: The dash “-” in this quote is called a hyphen. Authors sometimes use a hyphen to join two or more words together to make a new word, called a “compound word.” What two words are joined together with a hyphen in this quote? Why do you think the author did this?
Listen for: “foul-tasting”, “Because it describes how the fluid would taste if a predator tried to eat it.”

CHALLENGE QUESTION: What part of speech is the compound word “foul-tasting” in this sentence?
Listen for or explain: “It’s an adjective”

Note: The actual rule is that you can use a hyphen when you combine two words to become an adjective before a noun. This isn’t a teaching point in fourth grade, but it is something you might mention.

Ask: The foul-tasting fluid helps the frog survive in two ways. What are they?

Listen for: The poison can kill its enemy. It also tastes bad, so the enemy may spit it out and learn to stay away from the frogs.

Note: The first way, that it can kill, is explicit in the text. Students will need to infer that it tastes bad and what happens as a result of that. If necessary prompt students with this information.
### 12. Think back to the focus question. Using evidence from the text, write one way animals use poison to survive in the box on the right.

**Possible Answer:**

Another way animals use poison to survive is to kill its enemy. I think this because some millipedes ooze a poison gas that can kill more than six mice and a drop of the poison dart frog’s poison can kill thousands of mice.

Write the answer to this question with your red pencil.

### 13. Examine the photo and caption on page 57. Use details from the text to answer the questions on the right.

**Ask:** Read the caption and look carefully at the photo. What single word in the caption best describes what the photo is meant to show us?

**Listen for:** skin

**Ask:** What defense mechanism does the poison dart frog use to help it to survive?

**Listen for:** poison

**Ask:** What do you think “excrete” means? What words in the text make you think so?

**Listen for:** ooze, make; “from its skin,” “produce”

**Ask:** What do poison dart frogs excrete? Use exact words from the text.

**Listen for:** “a poisonous, foul-tasting fluid”
14. Reread the first paragraph on page 58 silently. Then use details from the text to answer the questions on the right.

“Of course, if a poisonous animal had a choice, it would rather not be attacked in the first place. It is better for it to stop an attack before it starts.” (page 58)

| sketch of an animal using warning colors as a defense mechanism | sketch of an animal using foul tastes as a defense mechanism | sketch of an animal using bad smells as a defense mechanism | sketch of an animal using irritating chemicals as a defense mechanism | sketch of an animal using sounds as a defense mechanism |

In the boxes below, draw a picture of each of the ways the text tells us that poisonous animals “stop an attack before it starts.” Be sure to label each picture with words from the text.
<table>
<thead>
<tr>
<th>Pulling it all together ...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WORD MEANING</strong></td>
</tr>
<tr>
<td><strong>15.</strong> Reread this note-catcher, noticing the words in bold print. Turn and talk with a partner about three ways you might figure out the meaning of an unknown word. Then, follow the directions on the right.</td>
</tr>
<tr>
<td><strong>SENTENCE MEANING</strong></td>
</tr>
<tr>
<td><strong>16.</strong> Look back at the answers you wrote in red. What do you notice about sentences that tell the purpose of a paragraph? Hint: You may need to look for these sentences in the text to see a pattern.</td>
</tr>
<tr>
<td><strong>THE BIG IDEA</strong></td>
</tr>
<tr>
<td><strong>17.</strong> Use the evidence you recorded on this sheet, as well as additional evidence from the text, to answer the question below in a well-written paragraph.</td>
</tr>
</tbody>
</table>
Synthesize!

Explain how animals use poison to survive (remember to use key words from the focus question in your response):

Possible Answer: Animals use poison to survive in many ways. They use it to make their enemy sick. The monarch butterfly makes a bird throw up if the bird eats it. Some animals use poison to trap their enemy. The pill millipede oozes sticky droplets that the predator gets stuck in. While the predator tries to clean off the drops, the millipede can escape. Other animals use poison to kill their enemy. Some millipedes release gas that can kill more than six mice. A drop of the poison dart frog’s poison can kill thousands of mice.
## Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can explain what a text says using specific details from the text. (RI.4.1)
I can make inferences using specific details from text. (RI.4.1)
I can determine the meaning of academic words or phrases in an informational text. (RI.4.4)
I can determine the meaning of content words or phrases in an informational text. (RI.4.4)
I can use a variety of strategies to read words. (RF.4.3)
I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4)

## Supporting Learning Target

<table>
<thead>
<tr>
<th>Supporting Learning Target</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can make inferences based on information from pictures and text in a section of <em>Animal Behavior: Animal Defenses</em>, “Poisonous Prey”.</td>
<td>• “Poisonous Prey” note-catcher (continued from Lesson 11; pages 17-23 Animal Defenses research journal)</td>
</tr>
<tr>
<td>• I can support my inferences with details and examples from pictures and texts in a section of <em>Animal Behaviors: Animal Defenses</em>, “Poisonous Prey”.</td>
<td></td>
</tr>
<tr>
<td>• I can find the meanings of unfamiliar words to help me better understand a section of <em>Animal Behaviors: Animal Defenses</em>, “Poisonous Prey”.</td>
<td></td>
</tr>
</tbody>
</table>
## Agenda

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Opening</td>
</tr>
<tr>
<td></td>
<td>A. Engaging the Reader and Reviewing Learning Targets (5 minutes)</td>
</tr>
<tr>
<td>2.</td>
<td>Work Time</td>
</tr>
<tr>
<td></td>
<td>A. Close Reading of “Poisonous Prey” Continued: How Do Animals Use Poison to Survive? (35 minutes)</td>
</tr>
<tr>
<td></td>
<td>B. Rereading an Informational Text: A Closer Look at Words (15 minutes)</td>
</tr>
<tr>
<td>3.</td>
<td>Closing and Assessment</td>
</tr>
<tr>
<td></td>
<td>A. Review Homework (5 minutes)</td>
</tr>
<tr>
<td>4.</td>
<td>Homework</td>
</tr>
<tr>
<td></td>
<td>A. Review your Preparing for a Science Talk note-catcher.</td>
</tr>
</tbody>
</table>

## Teaching Notes

- This is the second lesson where students closely read the section “Poisonous Prey” in the central text *Animal Behavior: Animal Defenses*. Students continue discussing and analyzing this section, ending with synthesizing their understanding of the text by answering the focus question: How do animals use poison to survive?
- The close reading process is meant to help students deeply understand a section of the text. Students read and reread in order to deconstruct the meaning of the text, and then reconstructing the meaning using evidence from the text. Using questioning geared toward a focus question helps to make the text accessible to students.
- The “Poisonous Prey” note-catcher (pages 17-23 Animal Research Journal) is meant to be discussion-based; the teacher can choose to invite students to work independently or in pairs or small groups when thinking about different questions, but the teacher should guide the whole class in a discussion of each section of the using the question in the guide, before moving on to the next section. This guide is not meant to be a worksheet that is assigned to students or partnered pairs to complete on their own.
- This close read sequence is designed as two lessons. However depending on the needs of your class, you may choose to split this close reading into three lessons.
- At the end of Lessons 11-12, the end goal is for students to be able to answer the focus question posed during Work Time A. Students are given the opportunity to do so in Lesson 12.
- Recognizing and using parts of words is the vocabulary strategy focused on in this lesson. You may have students familiarize themselves with common affixes and roots by giving them a list of common prefixes and suffixes and asking them to build and define nonsense words with them (for example, the nonsense word *unjumping* could be defined as not jumping). This allows students to play with the parts of words in an engaging way to build confidence in using this strategy within the lesson.
- In advance:
  - Review Ink-Pair-Share protocol (see Appendix).
  - Create “Poisonous Prey” Vocabulary poster.
  - Create Word Wall cards on index cards for the following words: entrap, poisonous, injecting, seizes, unpleasant, frantically, living, quickly, threatened, extract, warning (one word per index card)
- Post: Learning targets.
## Lesson Vocabulary

- affix, prefix, root, suffix; poisonous (56), injecting, seizes, unpleasant, entrap, frantically, living, quickly, threatened, extract (57)

## Materials

- Close Readers Do These Things anchor chart (from Module 1, Unit 1, Lesson 3; or from Lesson 2 of this module)
- “Poisonous Prey” note-catcher (page 17 of Animal Defenses research journal; from Lesson 11; one per student and one to display)
- “Poisonous Prey” Close Reading guide (from Lesson 11; for teacher reference))
- Animal Behavior: Animal Defenses (book; one per student and one for display; “Poisonous Prey,” pages 56–58)
- Equity sticks
- Vocabulary Strategies anchor chart (from Lesson 2)
- “Poisonous Prey” Vocabulary poster (teacher-created; see supporting materials)
- Common Affixes handout (one per student and one to display)
- Animal Defense Mechanisms glossary (page 26–28 of Animal Defenses research journal; one per student and one to display)
- Animal Defense Mechanisms glossary (completed, for teacher reference, from Lesson 3)
- Sticky notes (several for each student)
- Animal Defense Mechanisms Word Wall (from Lesson 3)
- Word Wall cards (see Teaching Notes)
- Millipede Defense Mechanisms: Preparing for a Science Talk note-catcher (page 24 of Animal Defenses research journal; one per student and one to display)
### Opening

<table>
<thead>
<tr>
<th>A. Engaging the Reader and Reviewing Learning Targets (5 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Tell students they will continue to closely read “Poisonous Prey,” picking up where they left off in Lesson 11.</td>
<td></td>
</tr>
<tr>
<td>• Invite students to use do a quick go ‘round to respond to this question (students may pass if they choose):</td>
<td></td>
</tr>
<tr>
<td>* “What is one new fact you learned after reading ‘Poisonous Prey’ in our previous lesson?”</td>
<td></td>
</tr>
<tr>
<td>• Focus students on the learning targets. Ask students to find a partner and explain in their own words the meanings of all three targets. Have pairs share their explanations and clarify as necessary. Students should have a good understanding of these targets from Lesson 11. Tell students that they will continue rereading “Poisonous Prey” today, making inferences and figuring out the meanings of words they might not know.</td>
<td>• Discussing and clarifying the language of learning targets helps build academic vocabulary.</td>
</tr>
</tbody>
</table>
A. Close Reading of “Poisonous Prey” Continued: How Do Animals Use Poison to Survive? (35 minutes)

- Display Close Readers Do These Things anchor chart and remind students that they will do all of these things to closely read this text:
  - Read small chunks of text slowly and think about the gist.
  - Reread each passage one sentence at a time.
  - Underline things that you understand or know about.
  - Circle or underline words that you do not know.
  - Talk with your partners about all of your good ideas.
  - State the gist or message of the paragraph in the margin.
  - Listen to the questions.
  - Go back to the text to find answers to questions.
  - Talk with your partners about the answers you find.

- Invite students to open to their “Poisonous Prey” note-catchers on pages 17-23 of their Animal Defenses research journal and to take out their copies of Animal Behavior: Animal Defenses, opening to page 56. Remind students that they have been using this close reading guide to help them think and take notes about this section of Animal Behavior: Animal Defenses.

- Use equity sticks to call on a student to read the focus question at the top of the close reading guide, and keep in mind as they work:
  * “How do animals use poison to survive?”

- Using the “Poisonous Prey” Close Reading guide (from Lesson 11), support students in rereading and discussing the remainder of the text, inviting them to Think-Pair-Share and discuss the prompts as necessary. Start the tenth row at the prompt: “Reread the fifth paragraph on page 56 (continued on page 57) silently. Then use details from the text to answer the question on the right

- Using the Ink-Pair-Share protocol, allow students to independently answer the focus question at the end of the close reading guide and share their responses. Listen for responses that include the three reasons outlined in “Poisonous Prey” Close Reading guide.
### Closing and Assessment

**B. Rereading an Informational Text: A Closer Look at Words (15 minutes)**

- Tell students that they have had a lot of practice with using different strategies to figure out vocabulary words that they don’t know. Point to “think about parts of the word that you know” on the Vocabulary Strategies anchor chart. Explain that today, they are going to focus on using *prefixes*, *roots*, and *suffixes* to determine word meaning for some words from “Poisonous Prey.”

- Display the “Poisonous Prey” Vocabulary poster. Explain that these words all have something in common. Point out that the words have parts underlined. Invite students to examine the words and notice any patterns or themes. Listen for students observing things like the underlining at the beginning of words is in red and the underlining at the end of words is in green, the endings that appear more than once (-ous, s).

- Define key terms and orient students to the poster:
  - The affixes have been underlined in these words; tell students that affixes are a letter or group of letters that are added to a word to change its meaning.
  - Prefixes are a type of affix that you add to the beginning of a word to change or add to its meaning. Ask students to examine the words on the poster and identify a prefix.
  - Suffixes are a letter/groups of letters that you add to the end of a word to change its meaning or part of speech. Ask students to examine the words on the poster and identify a suffix.
  - Roots are what you have left over when you take away any prefixes or suffixes. The root indicates the word’s basic meaning. Ask students to examine the words on the poster and identify a root.

- Tell students that knowing the way an affix changes the meaning of a root can help a reader figure out the meaning of a word they don’t know. Display and distribute Common Affixes handout. Write *entrap* on the board. Explain that this word is probably one that they haven’t seen before this unit. Model breaking it down by prefix/suffix and determining the meaning while using the handout. Say something like: “The root word jumps right out at me for this word—*trap* (circle root word). I can figure out the meaning of this word by looking more closely at the prefix. En- is the prefix (underline in red). I see on my handout that ‘en’ can mean ‘cause to.’ *Trap* means to catch something, so *entrap* must mean to cause something to be trapped. Let’s try to use that word in a sentence: A spider uses a web to *entrap* its enemy.”

### Meeting Students’ Needs

- Asking students to identify challenging vocabulary helps them monitor their understanding of a complex text. When students annotate the text by circling these words, it can also provide a formative assessment for the teacher.
### Work Time (continued)
- Invite students to add the word *entrap* the Animal Defense Mechanisms glossary.
- Invite students to form triads. Tell students that they get to choose three words from the “Poisonous Prey” Vocabulary poster and think about the word parts to determine the meaning of those words. Then, they will reread the text. Post directions:
  1. Find the meaning of the following words using word parts: poisonous, injecting, seizes, unpleasant, frantically, living, quickly, threatened, extract, warning
  2. With your partners, determine the meaning of each word by thinking about the word parts.
  3. Find the word in your glossary and write the definition, the strategy you used to figure out the meaning, and a sketch representing the word.
  4. Reread the text with your partners.
  5. Discuss the following questions: How has your understanding of these words changed? Which words are still confusing for you and why? Record your questions on a sticky note.
- Give students 10 minutes to look up the words, record their definitions, strategy used, and sketch, and discuss their understanding. Circulate and support as needed. Remind them that the words are listed alphabetically in the glossary of their research journals. If necessary, ask questions like: “How did you figure out the meaning of that word?” or “Are there any clues in the article that can help you figure out what that word means?” Listen for students to discuss the meanings of the words and using strategies from the Vocabulary Strategies anchor chart to determine meanings.
- Cold call triads to share their definitions and visuals/notes for each word. Clarify the definition of each word if necessary.
- Point out the Animal Defense Mechanisms Word Wall to students. Remind students that the Word Wall is a place to gather words about the topic they are studying.
- Show students the new Word Wall cards with one word on each card: *entrap, poisonous, injecting, seizes, unpleasant, frantically, living, quickly, threatened, extract, warning*. Use equity sticks to choose students to add the cards to the Word Wall.
- Invite students to use Fist to Five to briefly reflect on the learning target: “I can find the meanings of unfamiliar words to help me better understand ‘Poisonous Prey’,” with a fist being “I am not confident that I can meet this target on my own” and a five being “I can determine the meaning of an unfamiliar word on my own.”
- Tell students that they will revisit this target and continue to practice using the glossary and Vocabulary Strategies anchor chart to figure out more about it.
# Closing and Assessment

<table>
<thead>
<tr>
<th>A. Review Homework (5 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
</table>
| Invite students to open to the **Millipede Defense Mechanisms: Preparing for a Science Talk note-catcher** on page 24 of the research journal. Explain to students that in the next lesson, they will have a Science Talk discussing the following Science Talk question:
  - “Which millipede defense mechanism is most important? Why?”
| Explain to students that for homework, they should use the notes in their research journals to complete the first column of this note-catcher, “When I read or saw that (evidence) ...” recording evidence that answers the Science Talk question.
| If necessary, model briefly saying something like: “I remember reading in *Venom* that they have a tough exoskeleton. I wrote notes about this on the Listening Closely note-catcher from Lesson 10.” (Show note-catcher, pointing to the notes about this.) “I’ll write ‘they have a tough exoskeleton’ in the first row. This is an example piece of evidence someone would choose if they think the exoskeleton is the millipede’s most important defense mechanism.”
| Tell students they should only fill in the first column of this note-catcher. Explain that they will work through the rest of it in the next lesson, before they begin the Science Talk. |

## Homework

- Review your **Preparing for a Science Talk note-catcher**.
**Teacher Directions:** Copy the following text onto a large piece of chart paper for all the students to see. Underline prefixes in red and underline suffixes in green.

<table>
<thead>
<tr>
<th>poisonous</th>
<th>injecting</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>unpleasant</td>
<td>entrap</td>
<td></td>
</tr>
<tr>
<td>living</td>
<td>quickly</td>
<td></td>
</tr>
<tr>
<td>threatened</td>
<td>extract</td>
<td>warning</td>
</tr>
</tbody>
</table>

Poisonous Prey Vocabulary Poster
### Common Affixes

Prefix: letter groups added to the beginning of a word that change or add to the meaning  
Suffix: letter groups added to the end of a word that show the part of speech and/or add meaning

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Meaning</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>dis-</td>
<td>not, opposite of</td>
<td>discover, dishonest</td>
</tr>
<tr>
<td>en-</td>
<td>cause to</td>
<td>enjoy, entrap</td>
</tr>
<tr>
<td>ex-</td>
<td>out</td>
<td>exit, excrete</td>
</tr>
<tr>
<td>in-, im-</td>
<td>not, opposite of</td>
<td>independent, impossible</td>
</tr>
<tr>
<td>in-, im-</td>
<td>in or into</td>
<td>inside, immigrate</td>
</tr>
<tr>
<td>inter-</td>
<td>between, among</td>
<td>international, interrupt</td>
</tr>
<tr>
<td>mid-</td>
<td>middle</td>
<td>midsemester, midnight</td>
</tr>
<tr>
<td>mis-</td>
<td>wrongly</td>
<td>mistake, misbehave</td>
</tr>
<tr>
<td>non-</td>
<td>not, opposite of</td>
<td>nonfiction, nonstop</td>
</tr>
<tr>
<td>over-</td>
<td>too much, above</td>
<td>overgrown, overdue</td>
</tr>
<tr>
<td>pre-</td>
<td>before</td>
<td>preschool, prepare</td>
</tr>
<tr>
<td>re-</td>
<td>again, back</td>
<td>return, redo, reflect</td>
</tr>
<tr>
<td>sub-</td>
<td>under, lower</td>
<td>submarine, submerge</td>
</tr>
<tr>
<td>super-</td>
<td>above, beyond</td>
<td>supermarket, superman</td>
</tr>
<tr>
<td>un-</td>
<td>not, opposite of</td>
<td>unhappy, uncomfortable</td>
</tr>
<tr>
<td>under-</td>
<td>too little, below</td>
<td>underfed, underground</td>
</tr>
<tr>
<td>Suffix</td>
<td>Meaning</td>
<td>Example</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>-ed</td>
<td>past-tense verbs</td>
<td>jumped, smiled</td>
</tr>
<tr>
<td>-er</td>
<td>comparative</td>
<td>bigger, smarter</td>
</tr>
<tr>
<td>-er, -or</td>
<td>person connected with</td>
<td>teacher, doctor</td>
</tr>
<tr>
<td>-est</td>
<td>comparative</td>
<td>biggest, softest</td>
</tr>
<tr>
<td>-ful</td>
<td>full of</td>
<td>cheerful, careful</td>
</tr>
<tr>
<td>-ible, -able</td>
<td>can be done</td>
<td>likeable, comfortable</td>
</tr>
<tr>
<td>-ing</td>
<td>verb form</td>
<td>playing, singing</td>
</tr>
<tr>
<td>-ion, -tion, -ation, -ition</td>
<td>act, process</td>
<td>action, attention</td>
</tr>
<tr>
<td>-ity, -ty</td>
<td>state of</td>
<td>activity, honesty</td>
</tr>
<tr>
<td>-ive, -ative, -itive</td>
<td>adjective form of a noun</td>
<td>attentive, talkative</td>
</tr>
<tr>
<td>-less</td>
<td>without</td>
<td>helpless, careless</td>
</tr>
<tr>
<td>-ly</td>
<td>characteristic of</td>
<td>friendly, motherly</td>
</tr>
<tr>
<td>-ment</td>
<td>action or process</td>
<td>enjoyment, experiment</td>
</tr>
<tr>
<td>-ness</td>
<td>state of, condition of</td>
<td>happiness, darkness</td>
</tr>
<tr>
<td>-ous, -eous, -ious</td>
<td>having the qualities of</td>
<td>serious, poisonous</td>
</tr>
<tr>
<td>-s, -es</td>
<td>plurals</td>
<td>boys, millipedes</td>
</tr>
<tr>
<td>-y</td>
<td>characterized by</td>
<td>funny, rainy</td>
</tr>
</tbody>
</table>
Science Talk: Synthesizing What We Know about Millipedes
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1)

- a. I can prepare myself to participate in discussions.
- a. I can draw on information to explore ideas in the discussion.
- b. I can follow our class norms when I participate in a conversation.
- c. I can ask questions that are on the topic being discussed.
- d. I can connect my questions and responses to what others say.

I can accurately synthesize information from two texts on the same topic. (RI 4.9)

### Supporting Learning Targets

- I can effectively participate in a Science Talk about millipede defense mechanisms.
  - a. I can prepare for the Science Talk by using evidence from animal defense mechanism texts.
  - b. I can ask questions so I am clear about what is being discussed.
  - c. I can ask questions on the topic being discussed.
  - d. I can follow our class norms when I participate in a conversation.

### Ongoing Assessment

- Preparing for a Science Talk note-catcher (page 22 Animal Defenses research journal)
- Observation of Science Talk
# Agenda

1. **Opening**
   - A. Engaging the Reader: Quiz-Quiz-Trade (10 minutes)
   - B. Reviewing Learning Targets (5 minutes)

2. **Work Time**
   - A. Preparing for a Science Talk (15 minutes)
   - B. Conducting the Science Talk (15 minutes)
   - C. KWL: Millipede (5 minutes)

3. **Closing and Assessment**
   - A. Exit Ticket (10 minutes)

4. **Homework**
   - A. Continue reading your independent reading book for this unit.

---

# Teaching Notes

- This is the second of two Science Talks in this unit. This series of Science Talks helps students make progress toward SL4.1, which is formally assessed in Module 3.
- When students prepare for the Science Talk during Work Time A, they use the teacher feedback from the Science Talk in Lesson 9. Be sure to give feedback and return to students by this lesson.
- Part of the Science Talk preparation was assigned for homework after Lesson 12. Check that students have completed this; give time for them to complete it before this lesson if necessary.
- The preparation for the Science Talk focuses on students making inferences and paraphrasing information researched in Lessons 10–12. This helps students make progress toward SL4.2, which is formally assessed in the end of unit assessment in Lesson 14.
- The exit ticket is broken into two parts. The first part asks students to reflect on one of the guiding questions for the module. The second part asks students to rank the choices for expert group animals. Use these rankings to form the groups, which students begin working in during Lesson 1 of Unit 2.
- In advance: Display the Science Talk Norms and Participating in a Science Talk anchor charts (from Lessons 8 and 9).
- Review: Science Talk (see Appendix).
- Post: Learning targets.
<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
</table>
| goals, evidence, paraphrase | • Additional Vocabulary word cards (see Teaching Notes and supporting materials)  
• Vocabulary word cards (from Lesson 8)  
• Equity sticks  
• Science Talk Notes and Goal sheet (page 12 of Animal Defenses research journal; from Lesson 8; one per student)  
• Preparing for a Science Talk note-catcher (page 24 of Animal Defenses research journal; one per student and one to display)  
• Preparing for a Science Talk note-catcher (completed, for teacher reference)  
• *Venom* (book; one per student; page 15)  
• *Animal Behavior: Animal Defenses* (book; one per student; “Poisonous Prey,” pages 56–58)  
• Science Talk Norms anchor chart (teacher-created; from Lesson 8)  
• Participating in a Science Talk anchor chart (teacher-created; from Lesson 9)  
• Science Talk Criteria checklist (one for teacher)  
• Millipede Defense Mechanisms: KWL chart (page 13 Animal Defenses research journal; from Lesson 9; one per student)  
• Exit ticket (one per student) |
# Opening

## A. Engaging the Reader: Quiz-Quiz-Trade (10 minutes)
- Tell students that today they will be discussing the question: “Which millipede defense mechanism is most important? Why?” Explain that now that they have read about millipede defense mechanisms, they should have new thoughts or ideas related to this question. Explain that today they will prepare for the Science Talk by reviewing the vocabulary that they have collected related to millipede defenses. Remind students that they have been recording vocabulary words into their Animal Defenses research journals and that the class has been building a Word Wall with these terms.
- Explain that you would like them to do a short activity called Quiz-Quiz-Trade using words from the Word Wall to help build their understanding of these words. Post the following directions:
  
  **Quiz-Quiz-Trade:**
  
  1. Find a partner.
  2. Read definition—Read your word’s definition to your partner. Allow him or her to guess the word or ask for a hint.
  3. Give a hint—If your partner needs a hint, say one thing that helps you remember the meaning of this word. Allow your partner to guess and share your word.
  4. Switch—Have your partner read his or her definition and let you guess or receive a hint.
  5. Trade cards and find a new partner. Repeat Steps 2–5.
- Review the directions and clarify or model the process if necessary. Distribute the **Additional Vocabulary word cards** and the **Vocabulary word cards** (from Lesson 8). Explain that some they have played Quiz-Quiz Trade with some of these words, but that others are new from their recent reading about the millipede.
- Point out to students that the word is on one side of the card and the definition is on the other. Tell them to be sure to cover the word so their partner cannot see it when trying to guess the word.
- Give students 8 minutes to quiz and trade.
- Collect the Vocabulary word cards.

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Guiding questions provide motivation for student engagement in the topic, and give a purpose for reading a text closely.</td>
</tr>
<tr>
<td>• Discussing and clarifying the language of learning targets helps build academic vocabulary.</td>
</tr>
</tbody>
</table>
### Opening (continued)

**B. Reviewing Learning Targets (5 minutes)**
- Use equity sticks to call on students to read the learning targets:
  - I can effectively participate in a Science Talk about millipede defense mechanisms.
  - I can prepare for the Science Talk by using evidence from animal defense mechanism texts.
  - I can ask questions so I am clear about what is being discussed.
  - I can ask questions on the topic being discussed.
  - I can follow our class norms when I participate in a conversation.
- Invite students to turn to the Science Talk Notes and Goal sheet on page 12 in their Animal Defenses research journals and reread the feedback given by the teacher and the goal they set for themselves after the first Science Talk.
- Use a Think-Pair-Share:
  - “What is the purpose of a Science Talk?”
    - Listen for responses like: “To discuss big ideas, which helps us to better understand a topic.”
  - “What goals did you set for yourself after the last Science Talk?”
    - Listen for responses like: “I want to be sure to use evidence from my research to support what I say.”
  - “Based on the teacher feedback and your goal from last Science Talk, what is one thing you are going to try to do in today’s Science Talk?”
    - Listen for responses like: “The teacher suggested I should ask clarifying questions when I don’t understand what someone else is saying, so I’m going to be sure to ask a question like, ‘What did you mean when you said not all spiders are poisonous?’”
A. Preparing for a Science Talk (15 minutes)

- Invite students to open to the Preparing for a Science Talk note-catcher on page 24 of their Animal Defenses research journals. Post and remind students of the Science Talk question:
  - “Which millipede defense mechanism is most important? Why?”
- Remind students that they prepared for the Science Talk on their own for homework after the last lesson by recording evidence that answers the Science Talk question in the first column of the note-catcher.
- Explain to students that before they participate in the Science Talk, they will have a chance to add to their notes.
- Tell them they will be adding notes into the right-hand column, “I think that the most important millipede defense mechanism is ... because ...” Explain that the notes will be information paraphrased from their research, as well as inferences made from their research.
- Model paraphrasing and making an inference with the example evidence included on the note-catcher in the left-hand column: “They have a tough exoskeleton.”
- Say something like: “This is an example piece of evidence someone would choose if they think the exoskeleton is the millipede’s most important defense mechanism. We want to paraphrase and make an inference about it when we write our notes in the right-hand column. We’ve been paraphrasing what we’ve listened to throughout this unit when we listen closely to texts read to us. Paraphrasing is when you say something you read or listened to in your own words. So if we want to paraphrase this evidence, we’d say millipedes have a hard shell. Now we need to make an inference about this piece of evidence; we’ll think about how the tough exoskeleton or hard shell helps the millipede survive. Since the shell is hard, I think the exoskeleton protects the millipede’s body from predators—it’s like an armor that a knight would wear. So I’ll write that in the box next to the evidence: ‘I think that the most important millipede defense mechanism is its hard shell because it’s hard and protects its body from predators.’ I combined the evidence I paraphrased with the inference I made to write my notes.”
- Invite students to Think-Pair-Share, using the following steps to record inferences in the right-hand column:
  1. Reread the evidence in the left-hand column.
  2. Paraphrase the evidence.
  3. Make an inference by asking yourself, “How does this help the millipede survive?”
  4. Write your notes in the right-hand column.
### Work Time (continued)

- Be sure students have access to their texts: *Venom* (page 15) and *Animal Behavior: Animal Defenses* (pages 56–58) and the note-catchers used in Lessons 10–12, and remind students to refer to these resources if needed. Ask students to add to their note-catchers based on their conversations with their partners. Review the recording form briefly if needed.

- Bring students back together. Tell students to think back to their goal they shared with a peer in the opening. Have them look over the evidence they recorded on their note-catchers for homework. Ask students to Think-Pair-Share:
  * “What is something new you now know about millipede defense mechanisms you might want to mention in today’s science talk?”
  * “Is there anything you can add to your note-catcher that will help you meet your goal?”

- Circulate to confer as necessary, and remind students to use specific evidence from text to support their thinking.

### Meeting Students’ Needs

- Provide ELLs with additional sentence starters or frames to aid in language production. For example: “[Classmate’s name] said … and this makes me think …” or “I think the most important millipede defense mechanism is … because …”

### B. Conducting the Science Talk (15 minutes)

- Post the Science Talk Norms anchor chart and review as a class. Ask each student to turn to a partner and point out one norm the class might need to focus on after their last Science Talk. Have pairs share and discuss or clarify norms as necessary.

- Remind students that good discussions help you to think about topics in a new way. In order to help them expand their understanding of millipede defense mechanism, they will need to ask one another questions and build on one another’s ideas about which millipede defense mechanism is most important.

- Write a few sentence stems to help students during the upcoming discussion—for example:
  - “I wonder if _______?”
  - “I wonder why _______?”
  - “I agree and I also think _______. I disagree because _______.”
  - “That’s a good question. I think _______."

- Gather students whole group in a circle. Remind them to bring their journals. Display the Participating in a Science Talk anchor chart for the class to see. Briefly review the anchor chart with students and answer any questions. Explain that for this Science Talk, they will all participate in one talk rather than having a Fishbowl and two rounds.
**Work Time (continued)**

- Direct students to begin the Science Talk. Use the **Science Talk Criteria checklist** or begin a new one with the new blank form in this lesson’s supporting materials to monitor student progression toward the learning targets. Quickly redirect and support students as needed, but avoid leading the conversation. Remind students that their questions and comments should be directed to one another, not the teacher.

- Ask students to return to their seats. Invite them to reread the goals they wrote on the bottom of page 11 in their Animal Defenses research journals. Have them reflect on the following questions with a partner: “What progress did you make on your Science Talk goal today? What can you continue to work on?” Encourage students to base their discussion on their written goals and this lesson’s learning targets. Listen for students to state their goals and reference the learning targets as they share.

- Collect students’ Animal Defenses research journals. Use page 19 and the Science Talk Criteria checklist to assess individual students’ progress toward SL.4.1 and record feedback in the appropriate spot on students’ note-catchers.

<table>
<thead>
<tr>
<th>C. KWL: Millipede (5 minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Invite students to turn to the <strong>Millipede Defense Mechanisms: KWL chart</strong> in their Animal Defenses research journals. Remind them that scientists always reflect on and record what they’ve learned.</td>
</tr>
<tr>
<td>• Invite students to Think-Pair-Share. Ask:</td>
</tr>
<tr>
<td>* “Were any of your questions about millipedes answered in the Science Talk today?”</td>
</tr>
<tr>
<td>* “What new information did you learn from the Science Talk?”</td>
</tr>
<tr>
<td>• Tell students to write the answers to any questions they had in the W column in the “I Learned” column, in the “Information” section. Invite students to add any new questions to the W column as well.</td>
</tr>
<tr>
<td>• Tell students to write one new piece of information they learned in the “I Learned” column.</td>
</tr>
</tbody>
</table>
### Closing and Assessment

#### A. Exit Ticket (10 minutes)
- Distribute **exit tickets** to students. Explain that the first part asks students to answer one of the guiding questions for this module.
- Explain to students that in Part 2, they will be ranking the four animal choices for the expert groups. Tell students that the animal they are assigned to research will be the animal they write their narratives about, so they should think carefully about how they rank their choices.
- Circulate and support as needed. If necessary, prompt students by asking questions like: “Can you give an example of how an animal that we’ve read about uses defenses to survive?” Collect exit slips once students have completed them.

### Meeting Students’ Needs

- Using entrance/exit tickets allows you to get a quick check for understanding of the learning target so that instruction can be adjusted or tailored to students’ needs during the lesson or before the next lesson. Pairing entrance tickets with exit tickets allows both teachers and students to track progress from the beginning to the end of the lesson.

### Homework

- Continue reading your independent reading book for this unit.

### Meeting Students’ Needs

- "Meeting Students’ Needs" column is not used in this context.
**Teacher Directions:** Prepare a set of these additional cards and add these to the word cards from Lesson 8.

<table>
<thead>
<tr>
<th>retch</th>
<th>entrap</th>
</tr>
</thead>
<tbody>
<tr>
<td>affect</td>
<td>toxic</td>
</tr>
<tr>
<td>excrete</td>
<td>poisonous</td>
</tr>
<tr>
<td>injecting</td>
<td>seize</td>
</tr>
<tr>
<td>unpleasant</td>
<td>frantically</td>
</tr>
<tr>
<td>living</td>
<td>quickly</td>
</tr>
<tr>
<td>warning</td>
<td>extract</td>
</tr>
</tbody>
</table>
### Additional Vocabulary Word Cards (Back):
Animal Defense Word Definitions

<table>
<thead>
<tr>
<th>Action</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>throw up</strong></td>
<td>causes something to be trapped</td>
</tr>
<tr>
<td><strong>to change</strong></td>
<td>deadly or poisonous</td>
</tr>
<tr>
<td><strong>ooze, make</strong></td>
<td>having poison</td>
</tr>
<tr>
<td><strong>to put into something</strong></td>
<td>grabs, take hold</td>
</tr>
<tr>
<td><strong>not pleasing</strong></td>
<td>out of control</td>
</tr>
<tr>
<td><strong>alive</strong></td>
<td>doing something fast</td>
</tr>
<tr>
<td><strong>a sign of something bad coming</strong></td>
<td>to pull out</td>
</tr>
</tbody>
</table>
**Question:** Which millipede defense mechanism is most important? Why?

**Preparation:** Look back in your Animal Defenses research journal and texts about animal defense mechanisms to find evidence to help you answer the Science Talk question.

<table>
<thead>
<tr>
<th>When I read or see that (evidence) ...</th>
<th>It makes me think that animals’ bodies help them survive by ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Example) most spiders are venomous (<em>Venom</em> page 8)</td>
<td>(Example) I think that the venom paralyzes or kills the spider’s prey and enemies.</td>
</tr>
<tr>
<td>the mimic octopus mimics other creatures to turn off predators (“Award-Winning Survival Skills: How Animals Elude Prey”)</td>
<td>I think that since the mimic octopus can change to look like other dangerous animals, its enemies probably stay away from them because they think the octopus is dangerous and will poison or hurt them.</td>
</tr>
<tr>
<td>the three-banded armadillo rolls into a ball (“Award-Winning Survival Skills: How Animals Elude Prey”)</td>
<td>I think that it rolls into a ball to protect the parts of its body that don’t have a shell—its head, legs, and tail. By rolling into a ball, these parts are under its hard armor and protected from its enemies.</td>
</tr>
<tr>
<td>“bright colors can also be warning colors” (<em>Animal Behavior: Animal Defenses</em> page 58)</td>
<td>I think that the colors warn predators that the animal is dangerous, so they learn to stay away from it.</td>
</tr>
</tbody>
</table>
My Science Talk Notes: Ideas and Questions

- Do different kinds of millipedes emit different poisons?
- Is the poison dangerous to other millipedes, or just to predators?

Now that I have heard everyone’s reasons and their evidence, the millipede defense mechanism I think is most important is its poisonous gas because it is the most deadly and kills the millipede’s enemy the fastest.

My teacher’s feedback:

My goals for the next Science Talk:

For the next Science Talk, I will try to build on my classmates’ ideas more by saying things like, “To build on what so and so said ...” and “So and so said ... and that makes me think that ...”
Science Talk Criteria Checklist

I can effectively participate in a Science Talk about millipede defense mechanisms.
   a. I can prepare for the Science Talk by gathering evidence from scientific texts about simple machines.
   b. I can ask questions about the topic being discussed.
   c. I can build on other’s ideas when responding to their statements and questions.
   d. I can follow our class norms when I participate in a conversation.

<table>
<thead>
<tr>
<th>Student name</th>
<th>Prepares with evidence</th>
<th>Norms</th>
<th>Asks questions related to topic</th>
<th>Responds to and builds on others’ ideas/questions</th>
<th>Teacher comments</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>
Part 1:
How do animals’ bodies and behaviors help them survive? Use evidence from your research and from today’s Science Talk to support your answer.

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

Part 2:
Which animal would you like to research and write about for the performance task? Rank the following four choices, using a 1 for the animal you are most interested in researching and a 4 for the animal you are least interested in researching.

________ Monarch butterfly
________ Three-banded armadillo
________ Mimic octopus
________ Gazelle
Grade 4: Module 2B: Unit 1: Lesson 14
End of Unit 1 Assessment: Answering Questions and Summarizing Texts about Animal Defense Mechanisms

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Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can explain what a text says using specific details from the text. (RL.4.1)
I can make inferences using specific details from text. (RI.4.1)
I can determine the main idea using specific details from the text. (RL.4.2)
I can summarize informational or persuasive text. (RI.4.2)
I can paraphrase portions of a text that is read aloud to me. (SL.4.2)

Supporting Learning Targets

- I can paraphrase information read aloud about animal defense mechanisms.
- I can determine the main idea of “Hearing Sounds through the Ground.”
- I can summarize “Hearing Sounds through the Ground” using the main idea and supporting details found in the text.

Ongoing Assessment

- End of Unit 1 Assessment
- Tracking My Progress, End of Unit 1 recording form
## Agenda

<table>
<thead>
<tr>
<th>Agenda Item</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening</td>
<td></td>
</tr>
<tr>
<td>A. Reviewing Learning Targets (5 minutes)</td>
<td>In Part 1 of this assessment, students listen to a transcript (from a video about animal defense mechanisms) that is read aloud by the teacher. Since this is part of an assessment of speaking and listening standards, do not distribute this text to students.</td>
</tr>
<tr>
<td>2. Work Time</td>
<td>The learning target “I can summarize informational or persuasive text” (RI.4.2) will be assessed again in Unit 2; use the End of Unit 1 Assessment as a formative assessment of students’ current mastery of that standard, and to inform Unit 2 instruction.</td>
</tr>
<tr>
<td>A. End of Unit 1 Assessment: Answering Questions and Summarizing Texts about Animal Defense Mechanisms (50 minutes)</td>
<td></td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td></td>
</tr>
<tr>
<td>A. Reflecting on Learning Targets—Tracking My Progress (5 minutes)</td>
<td></td>
</tr>
<tr>
<td>4. Homework</td>
<td></td>
</tr>
<tr>
<td>A. Continue reading your independent reading book for this unit.</td>
<td></td>
</tr>
</tbody>
</table>
### Opening

**A. Reviewing Learning Targets (5 minutes)**
- Tell students that today they will complete a formal assessment in which they will do on their own much of what they have been practicing:
  - Read an informational text.
  - Identify and record the main idea in the graphic organizer.
  - Answer questions that are dependent on the text.
  - Paraphrase information after listening to a text being read aloud.
- Remind them that they will need to refer to the text in order to answer the questions thoroughly. Encourage the students to do their best. Let them know that this is a chance to show what they know and how much effort they are making to read carefully and identify important details in an informational text. This also is an opportunity to discover even more about animal defense mechanisms.
- Ask students to read the learning targets silently:
  - “I can determine the main idea of ‘Hearing Sounds through the Ground.’”
  - “I can summarize ‘Hearing Sounds through the Ground’ using the main idea and supporting details found in the text.”
  - “I can paraphrase information presented in a video on animal defense mechanisms.”
- Have students give a thumbs-up if they are clear on what they will be expected to do, a thumbs-sideways if they understand part but not all of what to do, and a thumbs-down if they are very unsure about what they should do. Address any clarifying questions before beginning the assessment.

### Meeting Students’ Needs

- Discussing and clarifying the language of learning targets helps build academic vocabulary.
<table>
<thead>
<tr>
<th>Work Time</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. End of Unit 1 Assessment: Answering Questions and Summarizing Texts about Animal Defense Mechanisms (50 minutes)</strong></td>
<td>• If students receive accommodations for assessments, communicate with the cooperating service providers regarding the practices of instruction in use during this study as well as the goals of the assessment.</td>
</tr>
<tr>
<td>• Distribute the End of Unit 1 Assessment: Answering Questions and Summarizing Texts about Animal Defense Mechanisms.</td>
<td>• For some students, this assessment may require more than the 50 minutes allotted. Consider providing students time over multiple days if necessary.</td>
</tr>
<tr>
<td>• Explain to students that for the first part of the assessment, they will be listening to a transcript from a video—“Masters of Disguise” and that after hearing it read aloud twice they will paraphrase it.</td>
<td></td>
</tr>
<tr>
<td>• Tell them that the first time it is read they should just listen. The second time, they should complete Part 1 of the assessment.</td>
<td></td>
</tr>
<tr>
<td>• Read the transcript of “Masters of Disguise” video to students.</td>
<td></td>
</tr>
<tr>
<td>• Tell students that they will now listen to the text a second time. Tell them they should now complete Part 1 of the assessment. Explain that when they complete that part, they may move on and continue to work on the remainder of the assessment.</td>
<td></td>
</tr>
<tr>
<td>• Read the transcript of “Masters of Disguise” a second time.</td>
<td></td>
</tr>
<tr>
<td>• Let students know that once they are finished with Part 1, they, may move on and work on the remainder of the assessment.</td>
<td></td>
</tr>
<tr>
<td>• While students are taking the assessment, circulate to monitor their test-taking skills. Prompt students throughout the assessment, letting them know how much time they have left and encouraging them to continue working. This is an opportunity to analyze students’ behaviors while taking an assessment. Document strategies students are using during the assessment. For example, look for students annotating their text, using their graphic organizer to take notes before answering questions, and referring to the text as they answer questions.</td>
<td></td>
</tr>
</tbody>
</table>
GRADE 4: MODULE 2B: UNIT 1: LESSON 14
End of Unit 1 Assessment: Answering Questions and Summarizing Texts about Animal Defense Mechanisms

Closing and Assessment

A. Reflecting on Learning Targets—Tracking My Progress (5 minutes)

- Congratulate students on their hard work on the end of unit assessment. Distribute the Tracking My Progress, End of Unit 1 recording form. Remind students that successful learners keep track and reflect on their own learning. Point out that they have been doing this informally all year during debriefs, when they consider how well they are progressing toward the learning targets.

- Review Step 1 in the self-assessment and remind students that this is where you would like them to explain what the target means to them. For example, the first target uses the phrase “determine the main idea using specific details.” They should write what the target means in their own words, by explaining what it means to figure out the main idea of a text and how details are used to support it.

- Point out the second step and explain that this is similar to the thumbs-up, -sideways, or -down that they have used in previous lessons. They should also explain why they think they “need more help,” “understand some,” or are “on the way,” and give examples. Consider giving students an example such as: “I circled that I need more help because I can’t remember what the word ‘determine’ means.”

- Collect students’ self-assessments to use as a formative assessment to guide instructional decisions during Units 2 and 3.

Meeting Students’ Needs

- Developing self-assessment and reflection supports all students, but research shows it supports struggling learners the most.

Homework

- Continue reading your independent reading book for this unit.
Transcript from “Masters of Disguise” Video

**Teacher Directions:** Read this transcript aloud twice for students to paraphrase on part 1 of their assessment.

NARRATOR: Have you ever wanted to be invisible? Camouflage means disguise. Animals, from insects to mammals, use camouflage to blend into their surroundings, to hide from predators or to catch a meal.

A flounder hides easily on the sandy ocean floor. Only its eyes and gills move. When it swims to a place that looks different, it can change color to blend in again.

A crab decorates itself with bits of shell and rock. Such a costume helps it look like what it isn't...part of the ocean floor.

An alligator snapping turtle lives in the swamps of Florida. Its gray, brown, or black shell and skin match the color of the mud, making it very hard to see.

A horned lizard blends into the gravel of the anthill. It is almost invisible as it sticks out its tongue, lapping up ants as they hurry by.

There is an insect called a walkingstick, and you can see why. When the green walkingstick moves, it looks like a twig shaking in the wind. Where its leg joins the body seems like any stem on the bush. Even the head of the walkingstick looks like a small bud.

Caterpillars are a favorite food for many birds. Birds look for leaves with bite marks, because there might be juicy caterpillars nearby. The most common caterpillar defense is not being seen at all. Being a careful eater is an advantage for a hornworm caterpillar. It covers its tracks by chewing the leaf evenly and quickly.

Then there's the dagger moth caterpillar. It actually hides behind a leaf as it eats. When most of the leaf is gone, the caterpillar chews through the stem, getting rid of the evidence. The leaf falls to the ground...joining the leftovers of other caterpillars in the area.

“Masters of Disguise,” adapted from NOVA, Animal Imposters. © 2003 WGBH Education Foundation
End of Unit 1 Assessment: Answering Questions and Summarizing Texts about Animal Defense Mechanisms

Name: 
Date: 

Long-Term Learning Targets Assessed:
I can paraphrase portions of a text that is read aloud to me. (SL.4.2)
I can explain what a text says using specific details from the text. (RI.4.1)
I can make inferences using specific details from text. (RI.4.1)
I can determine the main idea using specific details from the text. (RI.4.2)
I can summarize informational or persuasive text. (RI.4.2)

Part 1: Listen to the narrator in the video. Complete the graphic organizer to paraphrase what you hear.

More Facts about Camouflage as an Animal Defense Mechanism

<table>
<thead>
<tr>
<th>Animals That Use Camouflage</th>
<th>Examples of How Camouflage Is Used</th>
<th>How This Helps Animals Survive</th>
</tr>
</thead>
</table>
End of Unit 1 Assessment:
Answering Questions and Summarizing Texts about Animal Defense Mechanisms

Explain in your own words what this video was about.
Part 2: Read “Hearing Sounds through the Ground” for the gist. Then reread the text and use it to answer the questions below.
Answering Questions and Summarizing Texts about Animal Defense Mechanisms

Elephants talk to each other. They trumpet, growl, moan, bellow, and squeal. Elephants rumble to each other, too.

In fact, the rumbling is so low that humans can’t hear it. But elephants can hear it, and the deep sounds go farther than the higher-pitched sounds that we can hear.

Elephants rumble to warn other elephants that something dangerous is near. When elephant herds hear this rumbling sound, they do things to keep their babies safe. They clump into a tight group to keep their babies close. The entire elephant family turns toward the source of rumbling. Then the elephants slowly leave, as if the rumbling were a warning.

An elephant’s rumbling feels strange to humans. It is such a deep, low sound that the ground actually shakes. A team of scientists led by Dr. Caitlin O’Connell-Rodwell of Stanford University wondered if the ground-shaking part of this sound was important to elephants. The scientists thought it was possible that elephants might “listen” to the earth shaking beneath their feet.

To find out, the scientists studied wild elephants in Namibia, Africa. They used a machine to record the shaking that happens when elephants give their rumble call, the same machine scientists use to measure earthquakes. Then the scientists used another machine to shake the ground exactly as if an elephant were rumbling—but without the sound. The scientists played the noiseless shaking to the elephants and watched what the elephants would do.

When the elephants felt the ground rumble, they clumped into a group, they all turned to face in the same direction, and then they left—even though they did not hear the rumble call with their ears.

No one knows how elephants use these earth-shaking sounds in everyday life. Do they rely on sounds through the ground when changing weather blocks their usual calls? Can these vibrations carry a message even farther than rumbles through the air? Scientists have many more questions to answer as they work to learn how elephants talk to one another ... and what they’re saying.
1. The third paragraph says, “Elephants rumble to warn other elephants that something dangerous is near. When elephant herds hear this rumbling sound, they do things to keep their babies safe. They clump into a tight group to keep their babies close. The entire elephant family turns toward the source of rumbling. Then the elephants slowly leave, as if the rumbling were a warning.”

What is the main idea of this paragraph?
   a. Elephant rumbling keeps elephant babies safe.
   b. Elephant rumbling increases the chances of survival for the entire elephant herd.
   c. Rumbling is a signal of danger.
   d. When elephants hear rumbling, they leave.

2. Which line from the text is the best evidence to support the answer to Question 1?
   a. “Elephants rumble to warn other elephants that something dangerous is near.”
   b. “They clump into a tight group to keep their babies close.”
   c. “The entire elephant family turns toward the source of the rumbling.”
   d. “Then the elephants slowly leave.”
3. Read the following sentence from Paragraph 5 of the text.

“The scientists played the noiseless shaking to the elephants and watched what the elephants would do.”

Which explanation is most appropriate for why scientists played noiseless shaking to the elephants?

a. To determine if elephants might “listen” to the rumbling
b. To see how elephants protect their babies
   c. To warn the elephants of danger
   d. To cause the elephants to move to a new location

4. Which line from the text best explains why scientists still have more questions about how elephants talk to one another?

a. “An elephant’s rumbling feels strange to humans.”
   b. “The scientists thought it was possible that elephants ‘listen’ to the earth shaking beneath their feet.”
   c. “When elephants felt the ground rumble, they clumped into a group ... even though they did not hear the rumble call with their ears.”
   d. “No one knows how elephants use these earth-shaking sounds in everyday life.”

5. In the third paragraph, the text says, “The entire elephant family turns toward the source of rumbling.” What is the best definition of the word *source* as used in the context of this sentence?

a. thing from which something arises; origin
b. manufacturer
c. start of a stream or river
d. supplier of information
6. Select one sentence from the text that shows a similarity between elephants and humans. Record the sentence below.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

7. List one detail from the text that supports the conclusion that rumbling serves as an elephant defense mechanism.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Part 3: Reread the text and determine the main idea of the text. Identify three details that support the main idea.

<table>
<thead>
<tr>
<th>Hearing Sounds through the Ground</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Idea:</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Part 4: Summarizing the Text: After thinking more closely about this text, summarize what you think this reading is mostly about. Use several specific details from the text in your summary.

________________________________________________________________________
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________________________________________________________________________
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________________________________________________________________________
End of Unit 1 Assessment:
Answering Questions and Summarizing Texts about Animal Defense Mechanisms
(Answers, for Teacher Reference)

Long-Term Learning Targets Assessed:
I can paraphrase portions of a text that is read aloud to me. (SL.4.2)
I can explain what a text says using specific details from the text. (RI.4.1)
I can make inferences using specific details from text. (RI.4.1)
I can determine the main idea using specific details from the text. (RI.4.2)
I can summarize informational or persuasive text. (RI.4.2)

Part 1: Listen to the narrator in the video. Complete the graphic organizer to paraphrase what you hear.

More Facts about Camouflage as an Animal Defense Mechanism

<table>
<thead>
<tr>
<th>Animals That Use Camouflage</th>
<th>Examples of How Camouflage Is Used</th>
<th>How This Helps Animals Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible answers: Flounder</td>
<td>Possible answers:</td>
<td>Possible answer:</td>
</tr>
<tr>
<td>Crab</td>
<td>• Only gills and eyes of flounder move, allowing it to blend in with the ocean floor</td>
<td>• The predator thinks the walking stick is a twig, so instead of eating it, it keeps going looking for food.</td>
</tr>
<tr>
<td>Alligator</td>
<td>• Walking stick mimics a twig shaking in the wind</td>
<td></td>
</tr>
<tr>
<td>Horned lizard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walking stick</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Explain in your own words what this video was about.

Camouflage means disguise. Many animals use camouflage to protect themselves or catch food.
End of Unit 1 Assessment:
Answering Questions and Summarizing Texts about Animal Defense Mechanisms
(Answers, for Teacher Reference)

1. The third paragraph says, “Elephants rumble to warn other elephants that something dangerous is near. When elephant herds hear this rumbling sound, they do things to keep their babies safe. They clump into a tight group to keep their babies close. The entire elephant family turns toward the source of rumbling. Then the elephants slowly leave, as if the rumbling were a warning.”

What is the main idea of this paragraph?
   a. Elephant rumbling keeps elephant babies safe.
   b. **Elephant rumbling increases the chances of survival for the entire elephant herd.**
   c. Rumbling is a signal of danger.
   d. When elephants hear rumbling, they leave.

2. Which line from the text is the best evidence to support the answer to Question 1?
   a. **“Elephants rumble to warn other elephants that something dangerous is near.”**
   b. “They clump into a tight group to keep their babies close.”
   c. “The entire elephant family turns toward the source of the rumbling.”
   d. “Then the elephants slowly leave.”
End of Unit 1 Assessment:
Answering Questions and Summarizing Texts about Animal Defense Mechanisms
(Answers, for Teacher Reference)

3. Read the following sentence from Paragraph 5 of the text.
“The scientists played the noiseless shaking to the elephants and watched what the elephants would do.”
Which explanation is most appropriate for why scientists played noiseless shaking to the elephants?
   a. To determine if elephants might “listen” to the rumbling
   b. To see how elephants protect their babies
   c. To warn the elephants of danger
   d. To cause the elephants to move to a new location

4. Which line from the text best explains why scientists still have more questions about how elephants talk to one another?
   a. “An elephant’s rumbling feels strange to humans.”
   b. “The scientists thought it was possible that elephants ‘listen’ to the earth shaking beneath their feet.”
   c. “When elephants felt the ground rumble, they clumped into a group ... even though they did not hear the rumble call with their ears.”
   d. “No one knows how elephants use these earth-shaking sounds in everyday life.”

5. In the third paragraph, the text says, “The entire elephant family turns toward the source of rumbling.” What is the best definition of the word source as used in the context of this sentence?
   a. thing from which something arises; origin
   b. manufacturer
   c. start of a stream or river
   d. supplier of information
6. Select one sentence from the text that shows a similarity between elephants and humans. Record the sentence below.

Possible sentence choices:
- “Elephants talk to each other.”
- “They do things to keep their babies safe.”
- “Elephants ... warn other elephants that danger is near.”

7. List one detail from the text that supports the conclusion that rumbling serves as an elephant defense mechanism.

Possible details: “When they felt the ground rumble, they clumped into a group”; “They all turned to face the same direction”; “Then they left.”

Part 3: Reread the text and determine the main idea of the text. Identify three details that support the main idea.

<table>
<thead>
<tr>
<th>Hearing Sounds through the Ground</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Idea:</strong> Elephants using rumbling to warn one another of danger and communicate to the whole herd.</td>
</tr>
<tr>
<td><strong>Supporting Details:</strong></td>
</tr>
<tr>
<td>Possible answers:</td>
</tr>
<tr>
<td>• Rumblings are so low that they shake the ground.</td>
</tr>
<tr>
<td>• When one elephant rumbles, the herd groups together, protects the babies, and moves to safety.</td>
</tr>
<tr>
<td>• Scientists studied the rumblings and the ground-shaking to decide why they are important.</td>
</tr>
</tbody>
</table>
Part 4: Summarizing the Text: After thinking more closely about this text, summarize what you think this reading is mostly about. Use several specific details from the text in your summary.

Possible Answer:

Elephants communicate with one another through rumblings, deep sounds that human ears cannot hear. These rumblings are so low that they shake the ground! Elephants use rumbling to as a defense mechanism to warn one another about coming danger. When one elephant rumbles, the herd forms a tight clump with the babies at the center. They slowly leave the area together, all facing the same direction. Scientists conducted an experiment to determine if elephants used the ground-shaking as a defense the way they use the rumbling. They discovered that even without the sound, the reaction of the elephants was similar. This left scientists wondering why and how elephants use both the rumbling and the ground-shaking in their daily lives.
Learning target: I can determine the main idea using specific details from the text

1. The target in my own words is:

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

2. How am I doing? Circle one.

   I need more help to learn this   I understand some of this   I am on my way!

3. The evidence to support my self-assessment is:

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
**Learning target:** I can summarize a text using the main idea and supporting details found in the text.

1. The target in my own words is:

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

2. How am I doing? Circle one.

   [ ] I need more help to learn this
   [ ] I understand some of this
   [ ] I am on my way!

3. The evidence to support my self-assessment is:

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

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Learning target: I can paraphrase information presented in a text read aloud to me.

1. The target in my own words is:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. How am I doing? Circle one.

I need more help to learn this  I understand some of this  I am on my way!

3. The evidence to support my self-assessment is:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Unit 2: Using Writing to Inform

In this second unit, students research their expert group animal and its defense mechanisms. Close reading of informational texts about their expert group animal will prepare students for the mid-unit assessment in which they make inferences and summarize information from two informational texts. In the second half of the unit, students will synthesize information from their research by writing an informative piece about their expert group animal, in which their animals physical characteristics, habitat, predators, and defense mechanisms are described. This piece will become the introduction to their performance task, a Choose Your Own Adventure Narrative, written in unit 3. Their research in this unit will also serve as a resource for writing narratives with scientifically accurate details.

Guiding Questions And Big Ideas

• How do animals’ bodies and behaviors help them survive?
• How can a writer use knowledge from their research to inform and entertain?
• To protect themselves from predators, animals use different defense mechanisms.
• Writers use scientific knowledge and research to inform and entertain.

Mid-Unit 2 Assessment

Reading and Researching the Defense Mechanisms of the Pufferfish
This assessment centers on standards NYS ELA CCLS RI.4.1, RI.4.2, W.4.7, W.4.8, and L.4.4 a and b. In this assessment, students will read two texts on the puffer fish. They will answer text-dependent multiple choice and short answer questions demonstrating their ability to infer, summarize, and document what they have learned about a topic by taking notes.

End of Unit 2 Assessment

Writing an Informative Piece Text About Pufferfish Defense Mechanisms
This assessment centers on NYSP12 ELA CCLS RI.4.9, W.4.2, W.4.4, W.4.7, and W.4.8. In this assessment, students will write about the pufferfish and its defense mechanisms. Students will reread two texts from Unit 1 and synthesize information to plan a short, informative piece of writing that answers the question: “How does the pufferfish’s body and behavior help it survive?” In their writing, students must introduce the pufferfish and describe its defense mechanisms and use examples from both texts to support their description.
This module is designed to address English Language Arts standards as students read informational texts about animal defense mechanisms. However, the module intentionally incorporates Science Practices and Themes to support potential interdisciplinary connections to this compelling content. These intentional connections are described below.

**Big ideas and guiding questions are informed by the New York State Common Core K-8 Science Framework:**

- Next-Generation Science Standards 4L-S1-1
- From Molecules to Organisms: Structure and Processes

NYS Science Standard 4: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science. Key Idea 2: Organisms inherit genetic information in a variety of ways that result in continuity of structure and function between parents and offspring. Key Idea 5: Organisms maintain a dynamic equilibrium that sustains life. Key Idea 6: Plants and animals depend on each other and their physical environment.

**Texts**


3. “Award-Winning Survival Skills” by Lea Winerman (Science Word 59.4 (2002)).
This unit is approximately 2 weeks or 12 sessions of instruction.

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Lesson Title</th>
<th>Long-Term Targets</th>
<th>Supporting Targets</th>
<th>Ongoing Assessment</th>
<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td>Setting Purpose for a Deeper Study of Animal Defense Mechanisms</td>
<td>• I can accurately synthesize information from two texts on the same topic. (RI 4.9)</td>
<td>• I can synthesize information from my notes into a paragraph.</td>
<td>• Synthesis paragraph</td>
<td>• What Do Researchers Do? Anchor chart</td>
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<td>• Performance Task anchor chart</td>
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<td></td>
<td>• Guiding Questions anchor chart</td>
</tr>
<tr>
<td>Lesson 2</td>
<td>Reading Informational Texts: Launching the Research Process</td>
<td>• I can explain what a text says using specific details from the text. (RI.4.1)</td>
<td>• I can make inferences based on information from pictures and text from an online source.</td>
<td>• Expert Group Animal Defense Mechanisms: KWL chart</td>
<td>• Close Readers Do These Things anchor chart</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I can make inferences using specific details from the text. (RI.4.1)</td>
<td>• I can support my inferences with details and examples from pictures and text from an online source.</td>
<td>• Expert Group Animal Research supports</td>
<td>• Performance Task anchor chart</td>
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<tr>
<td></td>
<td></td>
<td>• I can use technology to collaborate with others to produce a piece of writing. (W.4.6)</td>
<td>• I can find the meanings of unfamiliar words to help me better understand a text.</td>
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<tr>
<td>Lesson 3</td>
<td>Reading Informational Texts: Reading Closely about Expert Group Animals on a Web Page</td>
<td>• I can explain what a text says using specific details from the text. (RL.4.1)</td>
<td>• I can make inferences based on information from pictures and text from an online source.</td>
<td>• Web Page research guide</td>
<td>• What Do Researchers Do? Anchor chart</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I can make inferences using specific details from the text. (RL.4.1)</td>
<td>• I can support my inferences with details and examples from pictures and text from an online source.</td>
<td>• Expert Group text summary</td>
<td>• Close Readers Do These Things anchor chart</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I can summarize informational or persuasive text.(RL.4.2)</td>
<td>• I can find the meanings of unfamiliar words to help me better understand a text.</td>
<td></td>
<td>• Vocabulary Strategies anchor chart</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I can use technology to collaborate with others to produce a piece of writing. (W.4.6)</td>
<td>• I can write a summary paragraph about my animal after closely reading a text.</td>
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</tr>
<tr>
<td>Lesson</td>
<td>Lesson Title</td>
<td>Long-Term Targets</td>
<td>Supporting Targets</td>
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<td>Anchor Charts &amp; Protocols</td>
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</tbody>
</table>
| Lesson 4 | Reading Informational Texts: Researching Expert Groups Animals | • I can explain what a text says using specific details from the text. (RI.4.1)  
• I can make inferences using specific details from the text. (RI.4.1) | • I can make inferences based on information from pictures and text.  
• I can support my inferences with details and examples from pictures and texts.  
• I can find the meanings of unfamiliar words to help me better understand a text. | • Expert Group Animal Defense Mechanisms: KWL chart  
• Research note-catcher | • Performance Task  
• Close Readers Do These Things anchor chart  
• Jigsaw protocol |
| Lesson 5 | Reading Informational Texts: Researching Expert Group Animals and Collecting Vocabulary | • I can explain what a text says using specific details from the text. (RI.4.1)  
• I can make inferences using specific details from the text. (RI.4.1)  
• I can accurately synthesize information from two texts on the same topic. (RI 4.9) | • I can make inferences based on information from pictures and text.  
• I can support my inferences with details and examples from pictures and texts.  
• I can find the meanings of unfamiliar words to help me better understand a text. | • Research note-catcher  
• Expert Group Animal Defense Mechanisms glossary  
• Vocabulary Strategies anchor chart  
• Close Readers Do These Things anchor chart | |
| Lesson 6 | Mid-Unit 2 Assessment: Reading and Research the Defense Mechanisms of the Pufferfish | • I can explain what a text says using specific details from the text. (RI.4.1)  
• I can make inferences using specific details from text. (RI.4.1)  
• I can summarize informational or persuasive text. (RI.4.2)  
• I can conduct a research project to become knowledgeable about a topic. (W.4.7)  
• I can document what I learn about a topic by taking notes. (W.4.8)  
• I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4 a and b) | • I can make inferences based on information from a text.  
• I can support my inferences with details and examples from a text.  
• I can summarize a text using the main idea and supporting details found in the text. | • Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish  
• Tracking My Progress, Mid-Unit 2 recording form | |
<table>
<thead>
<tr>
<th>Lesson</th>
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<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
</table>
| Lesson 7 | Planning to Write an Informative Piece: Synthesizing Research on Expert Group Animals | • I can accurately synthesize information from two texts on the same topic. (RI.4.9)  
• I can produce writing that is appropriate to task, purpose, and audience. (W.4.4)  
• I can group supporting facts together about a topic in an informative/explanatory text. (W.4.2a)  
• I can sort my notes into categories. (W.4.8)  | • I can identify characteristics of informative writing.  
• I can synthesize information from my research notes onto a planning graphic organizer.  
• I can group together facts from my research with related evidence in my informative piece.                                                                                                                                  | • Informative Page Planning graphic organizer                                                                                                                   | • Performance Task anchor chart  
• Guiding Questions anchor chart  
• Informational Texts anchor chart |
| Lesson 8 | Writing Informational Texts: Crafting Introductions                           | • I can introduce a topic clearly. (W.4.2a)                                                                                                                                                                                                                                                                                                             | • I can write an introduction paragraph for my informative piece that describes my expert group animal, its habitat, and its predators.  
• I can write a focus statement that answers the focus question and tells the topic of my writing.                                                                                                                               | • Draft of introduction paragraph                                                                                                                                  | • Effective Introductions anchor chart                                                                                                                  |
| Lesson 9 | Writing Informational Texts: Developing Body Paragraphs                        | • I can develop the topic with facts, definitions, details, and quotations. (W.4.2b)  
• I can construct a concluding statement or section of an informative/explanatory text. (W.4.2e)                                                                                                                                 | • I can write body paragraphs for my informative piece that describe the defense mechanisms of my expert group animal.  
• I can write a concluding statement for my informative piece that summarizes the defense mechanisms of my expert group animal.  
• I can group together scientifically accurate facts with related evidence in my informative piece.                                                                                                                           | • Draft of body paragraphs                                                                                                                                   | • Effective Body Paragraphs  
• Developing Body Paragraphs anchor chart                                                                                                                                  |
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Lesson Title</th>
<th>Long-Term Targets</th>
<th>Supporting Targets</th>
<th>Ongoing Assessment</th>
<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
</table>
| Lesson 10 | Writing Informational Texts: Revising for Supporting Details and Word Choice | • I can develop the topic with facts, definitions, details, and quotations. (W.4.2b)  
• I can use precise, content-specific language/vocabulary to inform or explain about a topic. (W.4.2d)  
• I can express ideas using carefully chosen words. (L.4.3a)  
• I can accurately use fourth-grade academic vocabulary to express my ideas. (L.4.6) | • I can revise my writing for accurate facts with related evidence using my planning graphic organizer.  
• I can use vocabulary from my research on animal defense mechanisms to write accurate descriptions in my informative piece. | • Revisions of informative piece | • Steps for Revising My Writing anchor chart  
• Informational Texts anchor chart |
| Lesson 11 | Writing Informational Texts: Editing for Conventions | • With support from peers and adults, I can use the writing process to produce clear and coherent writing. (W.4.5)  
• I can correctly use homophones (e.g., to, too, two; there, their). (L.4.1g)  
• I can use correct capitalization in my writing. (L.4.2a)  
• I can spell grade-appropriate words correctly. (L.4.2d)  
• I can use resources to check and correct my spelling. (L.4.2d) | • I can check my peers’ work for correct capitalization.  
• I can check my peers’ work for correct spelling. | • Edits of informative piece | • Spelling Convention anchor chart  
• Capitalization Conventions anchor chart  
• Whip-Around protocol |
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Lesson Title</th>
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<th>Supporting Targets</th>
<th>Ongoing Assessment</th>
<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 12</td>
<td>End of Unit 2 Assessment: Writing an Informative Text about Pufferfish Defense Mechanisms</td>
<td>• I can accurately synthesize information from two texts on the same topic. (RI.4.9)</td>
<td>• I can synthesize information from my research notes onto a planning graphic organizer.</td>
<td>• End of Unit 2 Assessment</td>
<td>• Guiding Questions anchor chart</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I can write informative/explanatory texts that convey ideas and information clearly. (W.4.2)</td>
<td>• I can group together facts from my research with related evidence in my informative piece.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• I can produce writing that is appropriate to task, purpose, and audience. (W.4.4)</td>
<td>• I can plan and write a draft of an informative piece describing the pufferfish and its defense mechanisms.</td>
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<tr>
<td></td>
<td></td>
<td>• I can conduct a research project to become knowledgeable about a topic. (W.4.7)</td>
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<td></td>
<td></td>
<td>• I can document what I learn about a topic by taking notes. (W.4.8)</td>
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<tr>
<td></td>
<td></td>
<td>• I can sort my notes into categories. (W.4.8)</td>
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</tbody>
</table>
Optional: Experts, Fieldwork, And Service

**Experts:**
- Invite an expert from the local zoo to come in and speak to students about animal defense mechanisms.

**Fieldwork:**
- Visit the local zoo to observe your expert animal in action.

**Service:**
- Find out about organizations working to protect your expert group animal and its habitat – get involved in helping/promoting this organization.

Optional: Extensions

- Ask students to conduct additional research on their expert group animal with additional texts or websites. Expand the web research students engage in to include an open search and evaluation online resources. Teach students to evaluate the reliability of these resources.
### Preparation and Materials

**Animal Defenses Research Journal**
In Lesson 1, students will use the Animal Defenses research journal (from Unit 1) to synthesize their research notes through writing a paragraph explaining how animals’ bodies and behaviors help them survive. This journal is referenced again in Lesson 10 when students revise for word choice—they use the glossary to find additional words to include in their informative pieces.

**Expert Group Animal Research Journal**
In Lessons 2–11, students will use an Expert Group Animal research journal to record notes and observations about their expert group animal.
- Three-banded Armadillo
- Springbok Gazelle
- Mimic Octopus
- Monarch Butterfly (See the Module overview document for details related to research on butterflies across Grades 4 and 5).

Students use this journal Lessons 7 through 11 when students plan, write, revise, and edit their informational pieces of the final performance task. They also will refer to it throughout Unit 3, as they work on their narrative pieces of the final performance task.

In advance of this unit, consider preparing the Expert Group Animal research journal (in Lesson 2) as a copied and stapled packet. In addition, consider providing students with a research folder for use throughout the module. This will help students keep their materials (research journals, texts, writing) organized and in one place.


**Web-based Research**
In Lesson 2 and Lesson 3 students use web-based articles to conduct initial research on their expert group animal. For classes that do not have the technology necessary to support web-based reading, an alternative is provided: see the print articles included as an additional resource in Lessons 2 and 3.
Grade 4: Module 2B: Unit 2: Recommended Texts
The list below includes texts with a range of Lexile® text measures about animal defenses. This provides appropriate independent reading for each student to help build content knowledge about the topic. Note that districts and schools should consider their own community standards when reviewing this list. Some texts in particular units or modules address emotionally difficult content.

It is imperative that students read a high volume of texts at their reading level in order to continue to build the academic vocabulary and fluency demanded by the CCLS.

Where possible, texts in languages other than English are also provided. Texts are categorized into three Lexile measures that correspond to Common Core Bands: below grade band, within band, and above band. Note, however, that Lexile® measures are just one indicator of text complexity, and teachers must use their professional judgment and consider qualitative factors as well. For more information, see Appendix 1 of the Common Core State Standards.

**Common Core Band Level Text Difficulty Ranges:**
(As provided in the NYSED Passage Selection Guidelines for Assessing CCSS ELA)
- Grades 2–3: 420–820L
- Grades 4–5: 740–1010L
- Grades 6–8: 925–1185L

<table>
<thead>
<tr>
<th>Title</th>
<th>Author and Illustrator</th>
<th>Text Type</th>
<th>Lexile Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gazelles</td>
<td>Megan Borgert-Spaniol (author)</td>
<td>Informational</td>
<td>275*</td>
</tr>
<tr>
<td><em>It’s a Baby Gazelle</em></td>
<td>Kelly Doudna (author)</td>
<td>Informational</td>
<td>400*</td>
</tr>
<tr>
<td>Armadillos</td>
<td>Steve Potts (author)</td>
<td>Informational</td>
<td>580</td>
</tr>
<tr>
<td><em>Deadly Blue-Ringed Octopuses</em></td>
<td>Daisy Allyn (author)</td>
<td>Informational</td>
<td>720</td>
</tr>
<tr>
<td>Gazelles</td>
<td>Lynette Robbins (author)</td>
<td>Informational</td>
<td>710*</td>
</tr>
<tr>
<td>Armadillos</td>
<td>Sheila Griffin Llanas (author)</td>
<td>Informational</td>
<td>710</td>
</tr>
</tbody>
</table>

*Lexile based on a conversion from Accelerated Reading level.
<table>
<thead>
<tr>
<th>Title</th>
<th>Author and Illustrator</th>
<th>Text Type</th>
<th>Lexile Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Geographic: Great Migrations: Butterflies</td>
<td>Laura Marsh (author)</td>
<td>Informational</td>
<td>710</td>
</tr>
<tr>
<td>An Octopus Is Amazing</td>
<td>Patricia Lauber (author)</td>
<td>Informational</td>
<td>730</td>
</tr>
</tbody>
</table>

Lexile measures within band level (740L–1010L)

<table>
<thead>
<tr>
<th>Title</th>
<th>Author and Illustrator</th>
<th>Text Type</th>
<th>Lexile Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octopuses</td>
<td>Deborah Coldiron (author)</td>
<td>Informational</td>
<td>740</td>
</tr>
<tr>
<td>Sea Anemone</td>
<td>Meryl Magby (author)</td>
<td>Informational</td>
<td>750*</td>
</tr>
<tr>
<td>Migrating with the Monarch Butterfly</td>
<td>Thessaly Catt (author)</td>
<td>Informational</td>
<td>830*</td>
</tr>
<tr>
<td>Armadillo’s Burrow</td>
<td>Dee Phillips (author)</td>
<td>Informational</td>
<td>850</td>
</tr>
<tr>
<td>The Australian Spotted Jellyfish</td>
<td>Susan Heinrichs Gray (author)</td>
<td>Informational</td>
<td>850*</td>
</tr>
<tr>
<td>Octopuses</td>
<td>Sandra Markle (author)</td>
<td>Informational</td>
<td>920</td>
</tr>
<tr>
<td>Giant Pacific Octopus: The World’s Largest Octopus</td>
<td>Leon Gray (author)</td>
<td>Informational</td>
<td>920</td>
</tr>
<tr>
<td>Butterflies</td>
<td>Seymour Simon (author)</td>
<td>Informational</td>
<td>925*</td>
</tr>
<tr>
<td>Box Jellyfish: Killer Tentacles</td>
<td>Natalie Lunis (author)</td>
<td>Informational</td>
<td>950</td>
</tr>
<tr>
<td>Octopuses</td>
<td>Anna Claybourne (author)</td>
<td>Informational</td>
<td>990</td>
</tr>
</tbody>
</table>

Lexile measures above band level (over 1010L)

<table>
<thead>
<tr>
<th>Title</th>
<th>Author and Illustrator</th>
<th>Text Type</th>
<th>Lexile Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>DK Eyewitness Books: Fish</td>
<td>Steve Parker (author)</td>
<td>Informational</td>
<td>1010*</td>
</tr>
<tr>
<td>The Astonishing Armadillo</td>
<td>Dee Stuart (author)</td>
<td>Informational</td>
<td>1170</td>
</tr>
</tbody>
</table>

*Lexile based on a conversion from Accelerated Reading level.
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Setting Purpose for a Deeper Study of Animal Defense Mechanisms
Setting Purpose for a Deeper Study of Animal Defense Mechanisms

Long-Term Target Addressed (Based on NYSP12 ELA CCLS)
I can accurately synthesize information from two texts on the same topic. (RI 4.9)

Supporting Learning Target | Ongoing Assessment
--- | ---
• I can synthesize information from my notes into a paragraph. | • Synthesis paragraph
## Agenda

1. **Opening**
   - A. Engaging the Reader: Revisiting the Performance Task Prompt (15 minutes)
   - B. Review Learning Target (5 minutes)
2. **Work Time**
   - A. Guided Synthesis of Unit 1 Texts: Organizing Notes (15 minutes)
   - B. Guided Synthesis of Unit 1 Texts: Writing a Synthesis Paragraph (15 minutes)
3. **Closing and Assessment**
   - A. Reveal of Expert Group Animals (5 minutes)
   - B. Review Homework (5 minutes)
4. **Homework**
   - A. Begin reading your independent reading book for this unit.

## Teaching Notes

- This lesson serves as a bridge from Unit 1 to Unit 2, allowing students to reflect on and synthesize the content learned in Unit 1. They revisit the Performance Task and What Do Researchers Do? anchor charts to frame and give purpose to the lesson.

- Because this is the first time synthesizing is formally taught in this module, a guided approach is used. During Work Time, the teacher models how to organize the research notes from the Animal Defenses research journal, using the Guiding Question Reflection graphic organizer. From here, he or she models how to take this information from the graphic organizer and organize it into a paragraph that answers the guiding question: “How do animals’ bodies and behaviors help them survive?” After watching the teacher complete this process, students are given time to complete it themselves. Synthesizing is revisited later in the unit in Lesson 7.

- The Guiding Question Reflection graphic organizer is familiar to students; a similar structure was used in Unit 1 when examining diagrams in informational text. This benefits students because it is a familiar structure, but they are learning to use it in a new context.

- Students’ exit tickets from Unit 1, Lesson 13 are returned, and they should be encouraged to use these in addition to their Animal Defenses research journal to write their paragraphs. Recall that the exit ticket asked them to answer the same question: “How do animals’ bodies and behaviors help them survive?” You may wish to have students compare their responses on the exit ticket to their final paragraph written in this lesson as a way to demonstrate their growth after learning to synthesize information. Also note that the Guiding Question Reflection graphic organizer is in students’ Animal Defenses research journal.

- In the Closing of this lesson, students discover which animal they will research for the remainder of the module. Be sure to form the expert groups before the lesson, keeping in mind students’ rankings on the Unit 1, Lesson 13 exit slip. It should be noted that the animals chosen for expert groups were selected intentionally for scaffolding purposes. The gazelle was chosen for students who generally need extra support in reading and research tasks; the mimic octopus and the armadillo will be appropriate for most students at this grade level; and the monarch butterfly will work well for students who need a challenge. These distinctions were made according to text complexity in *Animal Behavior: Animal Defenses* and *Venom*.
Setting Purpose for a Deeper Study of Animal Defense Mechanisms

Agenda

• In advance:
  – Assess Unit 1, Lesson 13 exit slips to be returned to students in Work Time A.
  – Create expert groups.


• Preview the Unit 2 Recommended Texts list and prepare books for students to browse and select at the close of this lesson. Students will use these books for independent reading and homework throughout this unit. Students should be given opportunities to read a variety of these texts related to the animal they will study throughout this unit. It is imperative that students have a volume of reading in order to build their knowledge and vocabulary. For more details, see the stand-alone document Foundational Reading and Language Skills: Grades 3-5 Resource Package. See in particular the document Independent Reading: The Importance of a Volume of Reading and Sample Plans.

Lesson Vocabulary

<table>
<thead>
<tr>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>informational, synthesize</td>
</tr>
<tr>
<td>• Performance Task anchor chart (begun in Unit 1, Lesson 1)</td>
</tr>
<tr>
<td>• Equity sticks</td>
</tr>
<tr>
<td>• What Do Researchers Do? anchor chart (begun in Unit 1, Lesson 2)</td>
</tr>
<tr>
<td>• Animal Defenses research journals (begun in Unit 1, Lesson 1; one per student; one to display)</td>
</tr>
<tr>
<td>• Guiding Question Reflection graphic organizer (one per student and one to display)</td>
</tr>
<tr>
<td>• Document camera</td>
</tr>
<tr>
<td>• Exit tickets (from Unit 1, Lesson 13; one per student)</td>
</tr>
<tr>
<td>• Guiding Question Reflection graphic organizer (answers, for teacher reference)</td>
</tr>
<tr>
<td>• Listening Closely note-catchers (page 2 and page 4 of Animal Defenses research journal)</td>
</tr>
<tr>
<td>• Venom (book; one to display)</td>
</tr>
<tr>
<td>• Guiding Questions anchor chart (begun in Unit 1, Lesson 1)</td>
</tr>
</tbody>
</table>
### A. Engaging the Reader: Revisiting the Performance Task Prompt (15 minutes)

- Congratulate students for wrapping up Unit 1. Tell them they now have a good foundation in what animal defense mechanisms are and how writers research topics they will write about.

- Draw students’ attention to the **Performance Task anchor chart** and reread the prompt. Remind them that they are working toward writing a narrative during this module. Review each of the bullet points with students. Explain that students may not understand each of these requirements, but that each of these components of their performance task will be a focus of class learning as they work towards writing their choose-your-own-adventure narrative.

- Explain that before they can begin writing about the animal for their performance task, they will need to research to learn more about it.

- Point to the second bullet point of the prompt (“an informational page …”) on the anchor chart. Tell students they will work on this part of the performance task in this unit.

- **Use equity sticks** to call on a student to read the second bullet point of the prompt aloud:
  - “An informational page with a physical description of your animal, its habitat, its defense mechanisms, and predators”

- **Ask:**
  - “Based on the anchor chart, what kind of information will we be looking for during our research?”

- Listen for responses like, “We need to find information about what the animal looks like.”

- Tell students they will work in expert groups to research animals. Remind them that they ranked their animal choices in Unit 1, Lesson 13. Tell them they will find out their expert groups and animals later in the lesson.

- Set the purpose for researching for the performance task by pointing out the **What Do Researchers Do? anchor chart**. Invite students to popcorn-read the bullet points on the chart.

---

**Meeting Students’ Needs**

- The performance task provides motivation for student engagement in the topic and gives a purpose to the lesson.
### Setting Purpose for a Deeper Study of Animal Defense Mechanisms

#### Opening (continued)
- **Ask:**
  - “What things did we do on this list when researching general animal defense mechanisms and the defense mechanisms of the millipede in Unit 1?”
  - Listen for responses such as: “We researched the question ‘How do animals’ bodies and behaviors help them survive?’” or “We researched by reading different informational texts about animal defense mechanisms and gathered notes in our research journals” or “We participated in Science Talks.”
  - **Ask:**
    - “How did engaging in these activities help us learn more about animal defense mechanisms?”
    - Listen for responses like: “When we researched, we were able to learn about different examples of defense mechanisms animals use” or “Science Talks helped us to talk about what we learned with others and helped us understand things that might have been confusing to us.”
  - **Point out these bullet points:**
    - “Analyze data and facts, and draw a conclusion.”
    - “Think about how new ideas or learning connect to what they already know.”
  - Explain that before they begin learning about a new animal, students will analyze their research notes in their Animal Defenses research journal to think about how their learning is connected and to synthesize the information they have learned to reflect on and answer the guiding question “How do animals’ bodies and behaviors help them to survive?”

#### B. Review Learning Target (5 minutes)
- **Direct students’ attention to the learning target. Invite them to silently read it to themselves:**
  - “I can synthesize information from my notes into a paragraph.”
  - Ask if there are any words that they are unsure of or that confuse them. As students point out words, ask for clarification and annotate the learning target with clarifying words or synonyms. For example:
  - “Synthesize: to combine information from several sources and make a general statement about the key learning”
- **Reread the learning target using the clarifying words and check for understanding with students.**

#### Meeting Students’ Needs
- Discussing and clarifying the language of learning targets helps build academic vocabulary.
### A. Guided Synthesis of Unit 1 Texts: Organizing Notes (15 minutes)

- Remind students that before they begin learning about a new animal, they will analyze their research notes in their Animal Defenses research journal to think about how their learning is connected and to synthesize the information they have learned. Post this guiding question for the module:
  * “How do animals’ bodies and behaviors help them survive?”

- Explain that a common mistake some people make when synthesizing is to summarize. When you summarize, you sum up the main points in one text, but when you synthesize, you combine information from more than one source to make a statement about key learning.

- Tell students that before they can respond to the guiding question, they must first look through their notes to gather and organize information.

- Distribute the Guiding Question Reflection graphic organizer and use a document camera to display a copy. Explain that they will use this graphic organizer to help them organize their notes.

- Remind students that they reflected briefly on the guiding question, “How do animals’ bodies and behaviors help them to survive?” in their exit tickets from Unit 1, Lesson 13 after their Science Talk. Return the exit tickets.

- Tell students that they will use the answers they recorded on these exit tickets in addition to their Animal Defenses research journals to answer synthesize their learning about animal defense mechanisms and reflect on the guiding question.

- Use equity sticks to call on a student to read the headings on the chart on the front of the Guiding Question Reflection graphic organizer.

- Ask students what they notice about the headings. Listen for them to say that the headings are similar to those on the Examining Diagrams note-catchers from Unit 1. Ask:
  * “How will this graphic organizer help us to synthesize what we have learned about animal defense mechanisms?”

- Listen for responses like: “We have to find details from two texts and use those details to make inferences about animal defense mechanisms.”
## Work Time (continued)

- Model filling in the graphic organizer using the example in the first row. Refer to the **Guiding Question Reflection graphic organizer** (answers, for teacher reference) as needed. The modeling may look like the following:
  - Model flipping through the Animal Defenses research journal to page 2, **Listening Closely note-catchers**.
  - Skim the note-catcher to see if there’s a defense mechanism to use that answers the guiding question. Notice the note ‘venom paralyzes or kills prey’ and write that in the first column of the Guiding Question Reflection graphic organizer.
  - Model including the source by writing “Venom p. 8.”
  - Model finding another detail about this defense mechanism by flipping in the Animal Defense research journal to page 4, **Listening Closely note-catcher**. Skim the note-catcher and point out the note that venom causes pain and makes the black widow’s enemy sick. Model looking for the exact quote from the text by flipping to **Venom** pp. 10 and 11, as noted at the top of the note-catcher.
  - Skim the page for the detail: “Black widows, found all over the U.S., rarely kill humans, but they can make us quite sick, causing not only fever, nausea, and pain …” and model writing it in the middle column of the Guiding Question Reflection graphic organizer, including the source.
  - Model making an inference about the defense mechanism based on these two details, writing the inference in the last column of the graphic organizer.
- Invite students to use the Guiding Question Reflection graphic organizer to organize their research notes from Unit 1. Circulate and support as necessary, being sure that they are addressing how animals use both their bodies and behaviors to survive.
- After 10 minutes, bring students back together whole group. Ask:
  * “Show a thumbs-up if you think you are ready to write your synthesis paragraph or a thumbs-down if you are not ready to write your synthesis paragraph.”
- Note any students who show a thumbs-down and check in with them during Work Time B.

## Meeting Students’ Needs

- Some students may benefit from having access to “hint cards”: small slips of paper or index cards that they turn over for hints about how/where to find information for each column of the graphic organizer. For example, a hint card might say, “Check the Determining the Main Idea note-catcher from Unit 1, Lesson 6.”
Work Time (continued)

B. Guided Synthesis of Unit 1 Texts: Writing a Synthesis Paragraph (15 minutes)

- Explain that students will now use their notes on the Guiding Question Reflection graphic organizer to write a paragraph.
- Invite them to turn and talk with a partner to discuss the guiding question:
  * “How do animals’ bodies and behaviors help them survive?”
- Tell students to share with their partner one way an animal’s body or behavior can help it to survive, and the inference they made. When the first partner has shared, invite the second partner to scan his or her notes for a detail that supports the first partner’s inference. Then, complete the same process as the second partner shares.
- Cold call a few pairs to share. If students need more support using their notes to support their inferring, model with something like the following:
  - “I’ll start off my paragraph by reflecting the guiding question. So my topic sentence will be, ‘Animals’ bodies and behaviors help them survive in many ways.’ I want to be sure to use the words ‘defense mechanisms,’ since that’s the scientific term for what I’m writing about.
  - I’ll add, ‘These are known as the animal’s defense mechanisms.’
  - Now I’m ready to start sharing some of my inferences. So I’ll write, ‘One common defense mechanism is venom. Venom is one of the most effective defense mechanisms. Venom can paralyze or kill an animal’s enemy or prey. For example, the venom of the black widow spider can make its enemy sick by causing a fever, nausea, or pain.’
- Notice the steps I took in these sentences. I started by writing about my inference, and then I included the details from the texts I used in my research that support that inference. Having those details on my graphic organizer made it easy for me to find them.”
- Invite students to independently write their synthesis paragraphs. Remind them to use key words from the guiding question in their response.
- Circulate and support as needed. Prompt students by asking:
  * “What did you infer about animal defense mechanisms in Unit 1?”
  * “What evidence in the texts we read supports your thinking?”

Meeting Students’ Needs

- Some students may benefit from having paragraph frames as a scaffold for their synthesis paragraph.
## Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>After about 10 minutes, bring students back together whole group. Cold call students to share one example from their paragraphs of how animals use their bodies and behaviors to survive. Record responses on the <strong>Guiding Questions anchor chart</strong>.</td>
</tr>
<tr>
<td>Collect students’ Guiding Question Reflection graphic organizers as a formative assessment on what they understand so far about animal defense mechanisms, as well as their ability to synthesize information.</td>
</tr>
</tbody>
</table>

## Closing and Assessment

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Reveal of Expert Group Animals (5 minutes)</strong></td>
</tr>
<tr>
<td>Tell students the moment they have been waiting for is here—they will now find out what animal they will research and write about for the performance task.</td>
</tr>
<tr>
<td>Share assigned animals and expert groups with students.</td>
</tr>
</tbody>
</table>

| **B. Browse and Select Recommended Texts (5 minutes)** |
| Allow students to browse the recommended texts for this unit. Encourage students to select texts related to the animal they will be studying. |
| As needed, reinforce routines for accountable independent reading as needed (see Teaching Notes). |

## Homework

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin reading your independent reading book for this unit.</td>
</tr>
</tbody>
</table>
**Directions:** Add the bullet points below under the performance task prompt.

**Performance Task**

After researching informational texts on animal defenses, create a choose-your-own adventure book about your chosen animal. Write an introduction that describes your animal’s physical characteristics, habitat, predators, and defense mechanisms. In your narrative, describe an encounter with a predator and two possible defense mechanisms for survival. Use details and examples from your research to develop your narrative, including concrete words, phrases, and sensory details to convey your animal’s experiences.

- An illustrated cover page with title
- An informational page with a physical description of your animal, its habitat, its defense mechanisms, and predators
- An “About Your Adventure” page explaining how to read the book and the possible challenges your animal could encounter (in question form)
- An introduction to your narrative, describing the challenge your animal encounters and two choices (defense mechanisms) it could make in order to survive
- A page for each choice (defense mechanism) describing the experience or events showing how your animal responds to the choice
- List of sources from your research
Guiding Question Reflection Graphic Organizer:
How do animals’ bodies and behaviors help them survive?

Name:  
Date: 

<table>
<thead>
<tr>
<th>Details from a text</th>
<th>Details from another text about this defense mechanism</th>
<th>My inferences</th>
</tr>
</thead>
<tbody>
<tr>
<td>* How do their bodies help them survive?</td>
<td>* What behaviors do they use to help them survive?</td>
<td>* What I infer or conclude about this defense mechanism</td>
</tr>
<tr>
<td>• One defense mechanism is ...</td>
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<tr>
<td>• One defense mechanism is ...</td>
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<tr>
<td>• One defense mechanism is ...</td>
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</tbody>
</table>
Guiding Question Reflection Graphic Organizer
How do animals’ bodies and behaviors help them survive?

**Explain how animals’ bodies and behaviors help them survive.** *(Remember to use key words from the guiding question in your response.)*

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## Guiding Question Reflection Graphic Organizer:

How do animals’ bodies and behaviors help them survive?

(Answers, for Teacher Reference)

<table>
<thead>
<tr>
<th><strong>Name:</strong></th>
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<tbody>
<tr>
<td><strong>Date:</strong></td>
<td></td>
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</tbody>
</table>

### Details from a text

- How do their bodies help them survive?
- What behaviors do they use to help them survive?

<table>
<thead>
<tr>
<th><strong>Details from another text about this defense mechanism</strong></th>
<th><strong>My inferences</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>“black widows, found all over the U.S., rarely kill humans, but they can make us quite sick, causing not only fever, nausea, and pain ...” Text: <em>Venom</em>, p. 11</td>
<td>Venom is one of the most effective defense mechanisms.</td>
</tr>
</tbody>
</table>

- One defense mechanism is ...

  “venom paralyzes or kills prey”

  Text: *Venom*, p. 8

### Details from another text about this defense mechanism

<table>
<thead>
<tr>
<th><strong>My inferences</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• What I infer or conclude about this defense mechanism</td>
</tr>
</tbody>
</table>

- Some animals trick other animals by looking like more dangerous or poisonous animals. Enemies know to stay away. Text: *Animal Behavior: Animal Defenses*, p. 91

- Shells protect some animals’ bodies from predators. Text: *Venom*, p. 15

- Predators see the bright colors and know to stay away from the animal because it is probably poisonous or venomous. Text: *Venom*, pp. 10 and 11

<table>
<thead>
<tr>
<th><strong>My inferences</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• What I infer or conclude about this defense mechanism</td>
</tr>
</tbody>
</table>

- One defense mechanism is ...

  “many animals mimic other creatures to turn off predators.”

  Text: *Award-Winning Survival Skills: How Animals Elude Predators*

- One defense mechanism is ...

  “hard shells”

  Text: *Award-Winning Survival Skills: How Animals Elude Predators*

- One defense mechanism is ...

  “Bright colors can also be warning colors.”

  Text: *Animal Behaviors: Animal Defenses*, p. 58

### Details from another text about this defense mechanism

- Venom is one of the most effective defense mechanisms.

- The hoverfly gains protection from predators by looking like a bee.” Text: *Animal Behavior: Animal Defenses*, p. 91

- “[Millipedes] have a tough exoskeleton.” Text: *Venom*, p. 15

- Spiders can be brown, black, red, or yellow (observations from photographs). Text: *Venom*, pp. 10 and 11

### My inferences

- What I infer or conclude about this defense mechanism
Explain how animals’ bodies and behaviors help them survive. (Remember to use key words from the guiding question in your response.)

Animals’ bodies and behaviors help them survive in many ways. These are known as the animal’s defense mechanisms. One common defense mechanism is venom. Venom is one of the most effective defense mechanisms. Venom can paralyze or kill an animal’s enemy or prey. For example, the venom of the black widow spider can make its enemy sick by causing a fever, nausea, or pain. Another way animals protect themselves is by mimicking other animals to look more dangerous or poisonous. Predators know to stay away. For example, the hoverfly looks like a bumblebee. Predators think it’s a bee and stay away because they do not want to be stung. Other animals protect themselves with a hard shell. The shell protects the animal’s body from predators. Millipedes are one example of an animal with a hard shell. One last way animals’ bodies help them survive is by having bright colors. The predators see the bright colors and know to stay away from the animal because it is probably poisonous or venomous. One example of an animal that uses warning colors is spiders. Some can be brown or black, but other more dangerous ones have red or yellow on them. Their enemies know to stay away! There are many ways animals use their bodies and behaviors to help them survive.
Grade 4: Module 2B: Unit 2: Lesson 2

Reading Informational Texts: Launching the Research Process
**GRADE 4: MODULE 2B: UNIT 2: LESSON 2**

**Reading Informational Texts:** Launching the Research Process

### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can explain what a text says using specific details from the text. (RL.4.1)
- I can make inferences using specific details from the text. (RL.4.1)
- I can use technology to collaborate with others to produce a piece of writing. (W.4.6)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can make inferences based on information from pictures and text from an online source.</td>
<td>• Expert Group Animal Defense Mechanisms: KWL chart</td>
</tr>
<tr>
<td>• I can support my inferences with details and examples from pictures and text from an online source.</td>
<td>• Expert Group Animal research guides</td>
</tr>
<tr>
<td>• I can find the meanings of unfamiliar words to help me better understand a text.</td>
<td></td>
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</tbody>
</table>

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### Agenda

1. **Opening**
   - A. Engaging the Reader: Expert Group Animal Defense Mechanisms KWL Chart (5 minutes)
   - B. Review Learning Targets (5 minutes)

2. **Work Time**
   - A. Guided Practice: Using a Web page to Research the Millipede (15 minutes)
   - B. Close Read: Examining Visuals on a Web page (10 minutes)
   - C. Close Read: Using a Web page to Research the Expert Group Animal (20 minutes)

3. **Closing and Assessment**
   - A. Share: Mix and Mingle (5 minutes)

4. **Homework**
   - A. Continue reading your independent reading book for this unit.

### Teaching Notes

- This lesson begins students’ research of their expert group animals. Therefore, students receive a new research journal that is specific to the “expert group animal” they are researching:
  - Three-banded Armadillo
  - Springbok Gazelle
  - Mimic Octopus
  - Monarch Butterfly

- The general name for students’ journal is Expert Group Animal research journal. These journals contain note-catchers and graphic organizers tailored for research on students’ assigned animal. However, each specific journal is titled and numbered the same across all expert groups. (For example, page 1 of every Expert Group Animal research journal – three-banded armadillos, springbok gazelles, mimic octopuses, and monarch butterflies – is the KWL Chart). This lets you refer to each material within the research journal across groups.

- Like Unit 1, for each lesson in Unit 2, the materials list references the complete Expert Group Animal research journal, and also signals the specific note-catchers and graphic organizers (by name and with page number) within the research journal that students will use in that particular lesson.

- The lesson opens with students using a KWL chart (page 1 of their Expert Group Animal research journal) to record what they already know about their expert group animal and questions they have about it. It is important to accept all answers, accurate and inaccurate, that students record in the Know column, as they will confirm information with evidence from their research texts throughout the research process.

- Since this is the first time students use a Web page for research, the first part of this lesson focuses on identifying reliable sources and modeling how to use a Web page to research, using the millipede as an example. Note that in this lesson, the Web pages have been chosen for students, so they are all reliable sources; however, it’s important for students to understand how to recognize reliable and accurate Web sites for future research.
## Agenda

<table>
<thead>
<tr>
<th>Teaching Notes (continued)</th>
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<tbody>
<tr>
<td>• The routine of examining visuals taught in Unit 1 is repeated in this lesson as an entry point into closely rereading the Web pages. Students work with a partner from their expert group to closely examine a visual from their Web pages. Based on what they notice in this visual, they make inferences about their expert group animal. Then, they read their first text about their expert group animal with their partners and then with their whole group. They will reread this text and write a summary about it in Lesson 3 in preparation for the Mid-Unit 2 Assessment.</td>
</tr>
<tr>
<td>• Please bear in mind that Youtube, social media video sites, and other website links may incorporate inappropriate content via comment banks and ads. While some lessons include these links as the most efficient means to view content in preparation for the lesson, be sure to preview links, and/or use a filter service, such as <a href="http://www.safeshare.tv">www.safeshare.tv</a>, for actually viewing these links in the classroom.</td>
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<tr>
<td>• This two-lesson arc mirrors Lessons 11 and 12 in Unit 1; students use a research guide similar to the Close Reading Guide to work through their expert group’s Web page. Since they have experience with this process and because the four expert groups use different Web pages, the teacher will not be able to support students through this research as intensively as in the Unit 1 lessons. It is expected that, because students have had practice with this process already, they will be able to work more independently.</td>
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<tr>
<td>• The expert group texts focus primarily on building background knowledge about the expert group animals. The key understandings students should take away from the texts are knowing their animal’s appearance, its habitat, and its diet.</td>
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<tr>
<td>• In advance:</td>
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<tr>
<td>– Review the Mix and Mingle in Checking for Understanding techniques (see Appendix).</td>
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<tr>
<td>– Prepare the Expert Group Animal research journal, where students will record their research notes and thinking throughout Unit 2. Consider stapling these journals into packets for students before this lesson. You may have each student create a research folder for storing their journals and other notes, texts, and writing throughout the module.</td>
</tr>
<tr>
<td>– Determine research partners for Work Times B and C.</td>
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<tr>
<td>– Prepare the technology needed for Web page research.</td>
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<tr>
<td>• Post: Close Readers Do These Things anchor chart (from Module 1), learning targets.</td>
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<tr>
<td>Lesson Vocabulary</td>
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<tr>
<td>----------------------------------------------------------------------------------</td>
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<tr>
<td>internet, reliable sources, publisher, author, bias, accuracy, timeliness</td>
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</tbody>
</table>
A. Engaging the Reader: Expert Group Animal Defense Mechanisms KWL Charts (5 minutes)

• Distribute Expert Group Animal research journals to students according to their assigned animal of study (see Teaching Notes).

• Tell students that they will use this journal in the same way that they used the Animal Defenses research journal—to record their notes and thinking about the expert group animal they are researching. This research journal, however, is specific to the particular animal they will be becoming “experts” on in their small groups.

• Ask students to move to sit with their expert groups.

• Invite them to open to page 1 in their Expert Group Animal research journals, to the Expert Group Animal Defense Mechanisms: KWL chart. Ask:
  * “Let’s review. How do we use this kind of graphic organizer?”

• Listen for responses like: “In the K column, we record what we know or think we know about a topic.”

• Explain that as in Unit 1, students will record their knowledge, questions, and learning about their expert group animal on this chart. Invite them to record the name of their expert group animal at the top of the KWL chart.

• Ask students to take several minutes to independently list what they think they already know about their expert group animal and its defense mechanisms in the left K column.

• Invite them to share what they already know or think they already know about their expert group animal and its defense mechanisms with their expert groups.

• Remind students that they will continue to learn about animal defense mechanisms and will look for evidence from different texts to either confirm or revise their current knowledge. This KWL chart will grow throughout the unit as a way to document the class’s growth in scientific knowledge about animal defense mechanisms.

• Tell students that they will now think about what they are curious about regarding their expert group animal and its defense mechanisms. What do they want to learn about their animal? Explain that this is questioning process that scientists go through as they research and discover new things in the world of science. Without a deep sense of curiosity, scientists wouldn’t have any motivation to conduct experiments or research a topic. Scientists often ask “Why?” or “How come?” or “What if?” Scientists always ask questions as part of scientific research.
## Opening (continued)

- Invite students to independently record at least three questions about what they want to know about their expert animal’s defense mechanisms in the middle W column. If students do not have much background knowledge about this topic, they may not have many questions at this time. This is okay, because the class will revisit and record more on this chart as they read other texts. Reiterate that they will be looking for answers to these questions as they continue learning about animal defense mechanisms during this unit. If necessary, remind students to refer to the Performance Task anchor chart to see what kind of information they will need to include on their informational page and in their narratives.

## B. Review Learning Targets (5 minutes)

- Direct students’ attention to the learning targets and read them aloud:
  - “I can make inferences based on information from pictures and text from an online source.”
  - “I can support my inferences with details and examples from pictures and text from an online source.”
  - “I can find the meanings of unfamiliar words to help me better understand a text.”
- Remind students that they discussed these learning targets in Unit 1. Ask them to turn to a partner and explain the targets in their own words.
- Use equity sticks to cold call a few students to share their explanations.
- Listen for students to share responses like: “An inference is when you think about what the text says and when you use your background knowledge to figure out what an author doesn’t explicitly say.”
- Tell students that today, they’ll have another opportunity to practice these targets using a different type of text when they begin researching their expert group animals. Ask:
  - “What does it mean to research?”
- Listen for responses such as: “It means to ask a question and then look for the answer in different sources, like books, articles, or videos.”
- Explain the research process and remind students that they experienced these steps in Unit 1 when researching animal defense mechanisms:
  - “Research begins with a question, which leads us to many sources.”
  - “Researchers read the sources, looking for the answer to their question.”
  - “Researchers take notes about what they have learned and synthesize their notes to answer their question.”

## Meeting Students’ Needs

- Discussing and clarifying the language of learning targets helps build academic vocabulary.
**Opening (continued)**

- Remind students that the focus of this unit is writing the informational page of their performance task and that the question they are trying to answer is:
  * “How does my expert group animal use its body and behaviors to help it survive?”

<table>
<thead>
<tr>
<th>Work Time</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Guided Practice: Using a Web page to Research the Millipede (15 minutes)</strong></td>
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<tr>
<td>• Explain that so far in this module, students have used informational articles and books to research animal defense mechanisms. Explain that good researchers use printed books and articles, but they also search for information on the internet. Tell students that in this lesson and the next, they will apply what they know about reading informational texts to researching using online sources. Ask:</td>
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<tr>
<td>* “What is the internet?”</td>
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<tr>
<td>• Listen for responses like: “It connects computers all over the world.”</td>
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<tr>
<td>• Explain that people use the internet to find information and that it is like a giant library. Ask:</td>
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<tr>
<td>* “What kind of sources can you find on the internet?”</td>
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<tr>
<td>• Listen for responses like: “Web sites, electronic versions of reference books, newspapers, blogs, or videos.”</td>
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<tr>
<td>• Tell students that since so many people have access to the internet, it is important to be sure they are using reliable sources when researching.</td>
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<tr>
<td>• Invite them to turn and talk. Ask:</td>
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<tr>
<td>* “What word do you hear in reliable? What does reliable mean?”</td>
<td></td>
</tr>
<tr>
<td>• Listen for responses such as: “I hear rely in that word” and “It means trusted or dependable.”</td>
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<tr>
<td>• Explain that students can determine whether an internet source is reliable by identifying the publisher, author, bias, accuracy, and timeliness of the source. Discuss the meaning of each of these terms.</td>
<td></td>
</tr>
<tr>
<td>* Publisher: the organization that produces or releases the work</td>
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<tr>
<td>* Author: the person who writes or creates the work</td>
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</tbody>
</table>
Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
</table>

| * Bias: the point of view on a topic |
| * Accuracy: correctness; the degree to which something is free of errors |
| * Timeliness: appropriate for the time |

- Explain to students that a reliable site to use for research is usually created by the government (.gov), educational institutions (.edu), or non-profit organizations (.org). Sometimes sources created by commercial organizations (.com) are reliable, but not always. A site that presents both sides of an argument or does not have any bias and that presents facts is also reliable. Explain that they can tell whether a site is accurate by looking at who created the site and their credentials, as well as if it does not have errors in spelling or grammar. Tell students that a site that is reliable is timely; it does not have out-of-date information. Explain that it should also be visually appealing, clean, and uncluttered, with links that work.

- Tell students that the Web pages they will use in this lesson have been chosen for them and are all reliable based on these criteria.

- Distribute the **Millipede Web Page research guide** to students and display one copy for modeling. Tell them that they will use this research guide to practice using a Web page to research the millipede.

- On a **computer**, display and model navigating the Web page identified at the top of the Millipede research guide and comparing it to a print source. Model these techniques:
  - Using section headings to skim and scroll for information
  - Explaining how pictures and videos are integrated into a Web page
  - Clicking on links like “invertebrates” (which leads to a glossary) and “centipedes” (which leads to a page with more information about centipedes)
  - Scrolling over the words linked in the Millipede Facts box, noticing that the definition of these words appears.

- Next, model using the Web page to research the millipede and recording notes starting on the second page of the Millipede Web Page research guide. Model Rows 1–4 on the research guide—determining the gist of the Web page through determining the main idea of Paragraphs 1 and 2. Answer any clarifying questions students may have.
Work Time (continued)

B. Close Read: Examining Visuals on a Web page (10 minutes)

- Tell students that they will now have a chance to research their expert group animals using online sources. Invite them to turn to their Web Page research guide starting on page 2 in their Expert Group Animal research journals.

- Draw their attention to the Close Readers Do These Things anchor chart and remind them that they will still do all of these things to closely read their Web pages, just like when they read print texts:
  - Read small chunks of text slowly and think about the gist.
  - Reread each passage one sentence at a time.
  - Underline things that you understand or know about.
  - Circle or underline words that you do not know.
  - Talk with your partners about all of your good ideas.
  - State the gist or message of the paragraph in the margin.
  - Listen to the questions:
    - Go back to the text to find answers to questions.
    - Talk with your partners about the answers you find.

- At this point, students should have access to a computer and be sitting with a partner. Distribute computers or ask them to move to computers as necessary.

- Invite students to open the Web browser with their partner and type the URL at the top of their Web Page research guide into the browser’s address bar.

- Use equity sticks to call on a student to read the focus task at the top of the Web Page research guide:
  - “Describe your expert group animal.”

- Tell students that they should keep this question in mind while they work.

- Explain that they are going to examine the visual in the article before they read the article. Tell them that, like when they examined visuals in Unit 1, they will think about what details they notice in the picture, then think about what inferences they can make about their expert group animal based on their observations. Next, they will read and reread the text, looking for details that support their inferences.

- Remind students that they will look for details and make inferences before reading the Web page article.
<table>
<thead>
<tr>
<th>Work Time (continued)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Review working with a partner by asking:</td>
<td></td>
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<tr>
<td>* “What does it look like or sound like when working in a small group with your peers?”</td>
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<tr>
<td>• Listen for responses like: “Wait my turn to speak, so I am heard,” “Don’t shout/speak too loudly,” “Make sure everyone gets a turn to speak,” “No one person does most/all of the speaking,” and “Use information from the text to support my ideas.”</td>
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<tr>
<td>• Prompt students through the process by inviting them to look at the photograph for their Web page.</td>
<td></td>
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<tr>
<td>• Tell them to independently examine the picture, thinking about what details they notice and writing them in the Details from the Visual column in the Expert Group Animal research guide.</td>
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<tr>
<td>• After several minutes, invite students to share with their partner what they wrote in the Details from the Visual column.</td>
<td></td>
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<tr>
<td>• Circulate to support students as needed. Notice whether they are following class norms when working in a group and identifying explicit details from the picture when sharing their notes. Prompt students if necessary by asking questions such as:</td>
<td></td>
</tr>
<tr>
<td>* “What do you notice in the picture?”</td>
<td></td>
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<tr>
<td>• Support students who struggled with this on the Mid-Unit 1 Assessment.</td>
<td></td>
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<tr>
<td>• If necessary, model briefly using the millipede Web page research guide.</td>
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<tr>
<td>• After several minutes, remind students that now they will use the details they observed in the diagram and their background knowledge to make inferences about their expert group animal.</td>
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<tr>
<td>• Invite them to think to themselves for a minute before sharing with their partner. Ask:</td>
<td></td>
</tr>
<tr>
<td>* “What do you infer about your expert group animal? What details from the picture did you base your inference on?”</td>
<td></td>
</tr>
<tr>
<td>• Once students have had some time to discuss their inferences, invite them to write their inferences on their research guide. Tell students to use the sentence frame: “We infer _______ because the picture/caption shows/says _______.”</td>
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<tr>
<td>• Circulate and support students as necessary, paying special attention to students who rated themselves with a fist, one finger, or two fingers during the Fist to Five for this target.</td>
<td></td>
</tr>
<tr>
<td>• Remind students that they will fill in the right-hand column after reading their Web page.</td>
<td></td>
</tr>
<tr>
<td>• Invite them to read their Web page together, looking for details that support their inferences. Ask students to record these details in the right-hand column of their note-catchers. Circulate to support as needed. Probe by asking:</td>
<td></td>
</tr>
</tbody>
</table>
**Work Time (continued)**

* “What details support your inferences about the visual?”
* “How does that detail support your inference?”

- Support students who struggled with this on the Mid-Unit 1 Assessment.

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**C. Close Read: Using a Web page to Research the Expert Group Animal (20 minutes)**

- Remind students that close readers reread the texts they are analyzing paragraph by paragraph, sentence by sentence, and that this applies to closely reading online sources as well. Explain that they will now reread their Web pages closely as a group to think carefully about the focus task:
  * “Describe your expert group animal.”
- Tell students they will be doing this by rereading paragraphs with their expert groups and discussing the text as they read.
- Using the Expert Group Animal research guide, guide students through rereading the text, inviting them to Think-Pair-Share and discuss the prompts with their expert groups.
- Circulate and support students as needed. Stop them at the sixth row and explain that they will continue rereading the Web page in the next lesson.

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**Meeting Students’ Needs**

- Some students may benefit from having a printed copy of the Web page with key sections pre-highlighted in their texts. This will help them focus on small sections rather than scanning the whole text for answers.
### Closing and Assessment

**A. Share: Mix and Mingle (5 minutes)**
- Tell students that, in a moment, they will share something new they learned about their expert group animal.
- Remind them that they used the Mix and Mingle Checking for Understanding technique (in Unit 1, Lesson 4) to practice sharing their opinions about whether fiction is a good teacher of facts.
- Review these directions for the Mix and Mingle:
  1. Stand up and find a partner.
  2. Share one new thing you learned about your expert group animal. Be respectful speakers and listeners.
  3. Thank your partner, then find another and repeat.
- Address any clarifying questions about Mix and Mingle.
- Give students 4 minutes to participate in the Mix and Mingle. Listen to their conversations for scientifically accurate facts about their expert group animals.

### Homework

- Continue reading your independent reading book for this unit.
Focus task: Describe your expert group animal.

Directions:
1. Look at the photograph on the top of your Web page.
2. In the first column of the graphic organizer below, record three details you see in the photograph.
3. In the second column of the graphic organizer, record the inferences you make based on these details.

**NOTE: Do NOT complete the right-hand column of the graphic organizer yet!

4. Read the Web page.
5. In the right-hand column of the graphic organizer, record details from the Web page that support your inferences in the middle column.

<table>
<thead>
<tr>
<th>Details from the Photograph (explicit information)</th>
<th>My Inferences (what I infer about this animal)</th>
<th>Details in the Text That Support My Inferences (confirmed with explicit information)</th>
</tr>
</thead>
</table>
## Millipede Web Page Research Guide

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is the gist of this Web page?</td>
<td></td>
</tr>
<tr>
<td>2. Look at the photographs at the top of the Web page. Then use details</td>
<td>What details do you see about the millipede in these photographs?</td>
</tr>
<tr>
<td>from the photographs to answer the question on the right.</td>
<td></td>
</tr>
<tr>
<td>3. Read the first two paragraphs. Then use details from the text to</td>
<td>Click on the word <strong>invertebrate</strong>. What does it mean?</td>
</tr>
<tr>
<td>answer the questions on the right.</td>
<td>What words does the author use to describe the millipede?</td>
</tr>
<tr>
<td>4. What is the main idea of these paragraphs? Write it in the box on</td>
<td></td>
</tr>
<tr>
<td>the right with your red pencil.</td>
<td></td>
</tr>
</tbody>
</table>
5. Read Paragraphs 3 and 4. Then use details from the text to answer the questions on the right.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you think <strong>inhabit</strong> means? What words in the text make you think so?</td>
<td></td>
</tr>
<tr>
<td>Where does the millipede live?</td>
<td></td>
</tr>
</tbody>
</table>

6. What is the main idea of these paragraphs? Write it in the box on the right with your red pencil.

7. Read Paragraphs 5 and 6. Then use details from the text to answer the questions on the right.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you think <strong>feeds</strong> means? What words in the text make you think so?</td>
<td></td>
</tr>
<tr>
<td>What does the millipede feed on?</td>
<td></td>
</tr>
</tbody>
</table>
8. What is the main idea of these paragraphs? Write it in the box on the right with your red pencil.

9. Read Paragraphs 7 and 8. Then use details from the text to answer the questions on the right.

What are the millipede’s predators?

List two ways the millipede protects itself from predators.

10. What is the main idea of these paragraphs? Write it in the box on the right with your red pencil.
### Pulling it all together ...

<table>
<thead>
<tr>
<th>11. Using evidence from the text, sketch what the millipede does when a predator is near.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. MAIN IDEA</td>
</tr>
<tr>
<td>Look back at the answers you wrote in red. What is the main idea of this Web page? Write it in the box on the right with your red pencil.</td>
</tr>
<tr>
<td>13. SUMMARY</td>
</tr>
<tr>
<td>After thinking more closely about your expert group’s Web page, summarize what you think this Web page is mostly about. Use several specific details from the Web page in your summary.</td>
</tr>
</tbody>
</table>
### Millipede Web Page Research Guide

<table>
<thead>
<tr>
<th>14. WORD MEANING</th>
<th>Add the definitions of the words in bold print to the glossary of your Expert Group Animal research journal.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reread this research guide, noticing the words in bold print. Talk with your partner about three ways you might figure out the meaning of an unknown word. Then, follow the directions on the right.</td>
<td></td>
</tr>
</tbody>
</table>

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Copyright © 2013 by Expeditionary Learning, New York, NY. All Rights Reserved.
**Expert Group Animal Defense Mechanisms: KWL Chart**

**Focus question:** How does the body and behaviors of your animal help it to survive?

<table>
<thead>
<tr>
<th>I THINK I KNOW ...</th>
<th>I WANT to know ...</th>
<th>I LEARNED ...</th>
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</thead>
<tbody>
<tr>
<td>Information</td>
<td>Y/N</td>
<td>Information</td>
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<td>Source</td>
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</tbody>
</table>
**Expert Group Animal Research Journal:**

Three-Banded Armadillo Web Page Research Guide

**Focus task:** Describe your expert group animal.

**Directions:**
1. Look at the photograph on the top of your Web page.
2. In the first column of the graphic organizer below, record three details you see in the photograph.
3. In the second column of the graphic organizer, record the inferences you make based on these details.
   **NOTE: Do NOT complete the right-hand column of the graphic organizer yet!**
4. Read the Web page.
5. In the right-hand column of the graphic organizer, record details from the Web page that support your inferences in the middle column.

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</table>
1. What is the gist of this Web page?

<table>
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<tr>
<th>2. Use the arrows to scroll through the slideshow photographs at the top of the Web page. Then use details from the photographs to answer the question on the right.</th>
</tr>
</thead>
</table>

What details do you see about the armadillo in these photographs?

3. Scroll down and read the section titled “Brazilian three-banded armadillo description.” Then use details from the text to answer the questions on the right.

<table>
<thead>
<tr>
<th>What words does the author use to describe the three-banded armadillo’s <strong>armour (armor) plating</strong>?</th>
</tr>
</thead>
</table>

How does the three-banded armadillo use its plating to protect itself?
4. What is the main idea of this section? Write it in the box on the right with your red pencil.

5. Scroll down and read the section titled “Brazilian three-banded armadillo biology.” Use details from the text to answer the questions on the right.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you think <strong>diet</strong> means? What words in the text make you think so?</td>
<td></td>
</tr>
<tr>
<td>What is the three-banded armadillo’s diet?</td>
<td>The Web page says, “It does not appear to <strong>seek refuge</strong> in burrows, and instead relies upon its ability to roll into an impregnable ball when threatened.” What does it mean to seek refuge? What words in the text make you think so?</td>
</tr>
<tr>
<td>Describe how a three-banded armadillo seeks refuge.</td>
<td></td>
</tr>
</tbody>
</table>
6. What is the main idea of this section? Write it in the box on the right with your red pencil.

7. Scroll down and read the sections titled “Brazilian three-banded armadillo range” and “Brazilian three-banded armadillo habitat.” Then use details from the text to answer the question on the right.

8. Now scroll back up to the photographs at the top of the Web page. Use details from the photographs to answer the question on the right.
9. What is the main idea of these sections? Write it in the box on the right with your red pencil.

10. Using evidence from the text, sketch what the armadillo does when a predator is near.
### 11. MAIN IDEA

Look back at the answers you wrote in red. What is the main idea of this Web page? Write it in the box on the right with your red pencil.

### 12. SUMMARY

After thinking more closely about your expert group’s Web page, summarize what you think this Web page is mostly about. Use several specific details from the Web page in your summary.
<table>
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<tr>
<th>13. WORD MEANING</th>
<th>Choose three words in bold print in this guide. Add the definitions of these words to the glossary of your Expert Group Animal research journal.</th>
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<tbody>
<tr>
<td>Reread this research guide, noticing the words in bold print. Talk with your partner about three ways you might figure out the meaning of an unknown word. Then, follow the directions on the right.</td>
<td></td>
</tr>
</tbody>
</table>
**Focus question: How does your expert group animal use its body and behaviors to help it survive?**

1. Turn to the index of *Animal Behavior: Animal Defenses*.
2. Write the page numbers that have information about your expert group animal:

| 1. Turn to the index of *Venom*. | 1. Use the text features to skim *Award-Winning Survival Skills*. |
| 2. Can this resource help you answer the focus question? Write “yes” or “no.” | 2. Can this resource help you answer the focus question? Write “yes” or “no.” |
| 3. If “yes,” write the page numbers that have information about your expert group animal | 3. If “yes,” write the name of the section that has information about your expert group animal: |

Skim the pages you noted above. List the defense mechanisms your expert group animal uses:
## Expert Group Animal Research Journal:
Three-Banded Armadillo
Research Note-Catcher

### Details about the Defense Mechanism
- How does the animal use its body to survive?
- How does the animal use its behavior to survive?

### How This Helps the Animal Survive
## Expert Group Animal Research Journal:
Three-Banded Armadillo Research Note-Catcher

<table>
<thead>
<tr>
<th>Page</th>
<th>Details about the Defense Mechanism</th>
<th>How This Helps the Animal Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• How does the animal use its body to survive?</td>
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<td>• How does the animal use its behavior to survive?</td>
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Criteria for Sketching:
It is based on your research this means...
- It has realistic coloring, shape, size, and habitat
- It has a descriptive and accurate caption that uses vocabulary from your research

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</table>
### Expert Group Animal Research Journal:
Three-Banded Armadillo
Glossary

<table>
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<tr>
<th>Word/Phrase</th>
<th>Definition</th>
<th>Vocabulary strategy I used to learn this word:</th>
<th>Sketch/Diagram</th>
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</table>
# Expert Group Animal Defense Mechanisms: KWL Chart

**Focus question:** How does the body and behaviors of your animal help it to survive?

<table>
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<th>I THINK I KNOW ...</th>
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<th>I LEARNED ...</th>
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<tr>
<td>Information</td>
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<td>Source</td>
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</tbody>
</table>
Focus task: Describe your expert group animal.

Directions:
6. Look at the photograph on the top of your Web page.
7. In the first column of the graphic organizer below, record three details you see in the photograph.
8. In the second column of the graphic organizer, record the inferences you make based on these details.
   **NOTE: Do NOT complete the right-hand column of the graphic organizer yet!**
9. Read the Web page.
10. In the right-hand column of the graphic organizer, record details from the Web page that support your inferences in the middle column.

<table>
<thead>
<tr>
<th>Details from the Photograph (explicit information)</th>
<th>My Inferences (what I infer about this animal)</th>
<th>Details in the Text That Support My Inferences (confirmed with explicit information)</th>
</tr>
</thead>
</table>
1. What is the gist of this Web page?

2. Use the arrows to scroll through the slideshow photographs at the top of the Web page. Then use details from the photographs to answer the question on the right.

   What details do you see about the springbok in these photographs?

3. Now scroll through the slideshow videos. Use details from the videos to answer the question on the right.

   What details do you see about the springbok in these videos?
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Scroll down and read the section titled “Springbok description.” Then use details from the text to answer the questions on the right.</td>
<td>What words does the author use to describe the springbok?</td>
</tr>
<tr>
<td>5. What is the main idea of this section? Write it in the box on the right with your red pencil.</td>
<td></td>
</tr>
</tbody>
</table>
6. Scroll down and read the section titled “Springbok biology.” Then use details from the text to answer the questions on the right.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you think <strong>graze</strong> means? What words in the text make you think so?</td>
<td>What does the springbok graze on?</td>
</tr>
<tr>
<td>The Web page says, “Springboks are renowned for their <strong>pronking</strong>, or <strong>stotting</strong>, behavior.” What does pronking or stotting mean? What words in the text make you think so?</td>
<td>Describe how a springbok uses pronking to protect itself.</td>
</tr>
</tbody>
</table>

7. What is the main idea of this section? Write it in the box on the right with your red pencil.

**Springbok Gazelle**

Web Page Research Guide

**Springbok biology.**

The Web page says, “Springboks are renowned for their **pronking**, or **stotting**, behavior.” What does pronking or stotting mean? What words in the text make you think so?

Describe how a springbok uses pronking to protect itself.
8. Scroll down and read the sections titled “Springbok range” and “Springbok habitat.” Then use details from the text to answer the question on the right.

<table>
<thead>
<tr>
<th>Question</th>
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</tr>
</thead>
<tbody>
<tr>
<td>What do you think <strong>habitat</strong> means? What words in the text make you think so?</td>
<td></td>
</tr>
<tr>
<td>What is the springbok’s habitat?</td>
<td></td>
</tr>
</tbody>
</table>

9. Now scroll back up to the photographs and video at the top of the Web page. Use details from the photographs and videos to answer the question on the right.

Describe the springbok’s habitat.

10. What is the main idea of these sections? Write it in the box on the right with your red pencil.
11. Using evidence from the text, sketch what the springbok does when a predator is near.

12. MAIN IDEA

Look back at the answers you wrote in red. What is the main idea of this Web page? Write it in the box on the right with your red pencil.
## Pulling it all together ...

### 13. SUMMARY

After thinking more closely about your expert group’s Web page, summarize what you think this Web page is mostly about. Use several specific details from the Web page in your summary.

<table>
<thead>
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<th>Summary</th>
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### 14. WORD MEANING

Reread this research guide, noticing the words in bold print. Talk with your partner about three ways you might figure out the meaning of an unknown word. Then, follow the directions on the right.

Choose three words in bold print in this guide. Add the definitions of these words to the glossary of your Expert Group Animal research journal.
Focus question: How does your expert group animal use its body and behaviors to help it survive?

1. Turn to the index of *Animal Behavior: Animal Defenses*.
2. Write the page numbers that have information about your expert group animal:

1. Turn to the index of *Venom*.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the page numbers that have information about your expert group animal:

1. Use the text features to skim *Award-Winning Survival Skills*.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the name of the section that has information about your expert group animal:

Skim the pages you noted above. List the defense mechanisms your expert group animal uses:
<table>
<thead>
<tr>
<th>Page</th>
<th>Details about the Defense Mechanism</th>
<th>How This Helps the Animal Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• How does the animal use its body to survive?</td>
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<td></td>
<td>• How does the animal use its behavior to survive?</td>
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</tbody>
</table>
## Details about the Defense Mechanism
- How does the animal use its body to survive?
- How does the animal use its behavior to survive?

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| Caption: | Caption: |

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<p>| Caption: | Caption: |</p>
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</table>
Expert Group Animal Research Journal:
Mimic Octopus

Name:  
Date:  

Expert Group Animal Defense Mechanisms: KWL Chart

**Focus question:** How does the body and behaviors of your animal help it to survive?

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</table>
Focus task: Describe your expert group animal.

Directions:
11. Look at the photograph on the top of your Web page.
12. In the first column of the graphic organizer below, record three details you see in the photograph.
13. In the second column of the graphic organizer, record the inferences you make based on these details.
   **NOTE: Do NOT complete the right-hand column of the graphic organizer yet!**
14. Read the Web page.
15. In the right-hand column of the graphic organizer, record details from the Web page that support your inferences in the middle column.

| Details from the Photograph (explicit information) | My Inferences (what I infer about this animal) | Details in the Text That Support My Inferences (confirmed with explicit information) |
1. What is the gist of this Web page?

2. Scroll down to the photographs of the mimic octopus. Then use details from the photographs to answer the question on the right.

   There are six photographs—three in a column on the left, and three in a column on the right. Which column shows photographs of the mimic octopus?

   How are the photographs in the column on the left related to the photographs in the column on the right?

   What details do you see about the mimic octopus in these photographs?

3. Scroll back up to the beginning of the post and read the first two paragraphs. Then use details from the text to answer the questions on the right.

   What do you think **transformation** means? What words in the text make you think so?

   What animal went through a transformation?
4. The first paragraph is an introduction to the post.

5. What is the main idea of the second paragraph? Write it in the box on the right with your red pencil.

6. Scroll down and read the third, fourth, and fifth paragraphs. Then use details from the text to answer the questions on the right.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you think <strong>impersonate</strong> means? What words in the text make you think so?</td>
<td></td>
</tr>
<tr>
<td>What does the mimic octopus impersonate?</td>
<td></td>
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<tr>
<td>Why might the mimic octopus want to impersonate venomous or distasteful animals?</td>
<td></td>
</tr>
<tr>
<td>Where has the mimic octopus been seen?</td>
<td></td>
</tr>
</tbody>
</table>
7. Using details from the fourth paragraph, sketch the mimic octopus impersonating a sea snake in the box to the right.

8. What is the main idea of Paragraphs 3–5? Write it in the box on the right with your red pencil.

9. Scroll down and read the sixth paragraph. Then use details from the text to answer the questions on the right.

What do you think **mimicking** means? What words in the text make you think so?

What are some benefits of mimicking other animals?
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
</table>
| 10. Read the seventh through ninth paragraphs. Then use details from the text to answer the questions on the right. | What makes the mimic octopus different from snakes, flies, spiders, and plants that use mimicry as a defense mechanism?  
What is a predator of the mimic octopus? |
| 11. What is the main idea of Paragraphs 6–9?  
Write it in the box on the right with your red pencil. |  
| 12. Read Paragraphs 10–13. Then use details from the text to answer the question on the right. | What do you think well-suited means? What words in the text make you think so?  
What makes the mimic octopus well-suited to transform into other animals? |
<table>
<thead>
<tr>
<th>13. What is the main idea of Paragraphs 10–13? Write it in the box on the right with your red pencil.</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Read from Paragraph 14 to the end of the post. What is the main idea of these paragraphs? Write it in the box on the right with your red pencil.</td>
</tr>
</tbody>
</table>

**Pulling it all together ...**

| 15. Using evidence from the text, sketch what the mimic octopus does when a predator is near. |
16. MAIN IDEA
Look back at the answers you wrote in red. What is the main idea of this Web page? Write it in the box on the right.

17. SUMMARY
After thinking more closely about your expert group’s Web page, summarize what you think this Web page is mostly about. Use several specific details from the Web page in your summary.

18. WORD MEANING
Reread this research guide, noticing the words in bold print. Talk with your partner about three ways you might figure out the meaning of an unknown word. Then, follow the directions on the right.

Choose three words in bold print in this guide. Add the definitions of these words to the glossary of your Expert Group Animal research journal.
Focus question: How does your expert group animal use its body and behaviors to help it survive?

2. Write the page numbers that have information about your expert group animal:

1. Turn to the index of Venom.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the page numbers that have information about your expert group animal:

1. Use the text features to skim Award-Winning Survival Skills.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the name of the section that has information about your expert group animal:

Skim the pages you noted above. List the defense mechanisms your expert group animal uses:
**Details about the Defense Mechanism**
- How does the animal use its body to survive?
- How does the animal use its behavior to survive?

<table>
<thead>
<tr>
<th>Page</th>
<th>How This Helps the Animal Survive</th>
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<tbody>
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</tbody>
</table>
## Details about the Defense Mechanism

- How does the animal use its body to survive?
- How does the animal use its behavior to survive?

## How This Helps the Animal Survive

<table>
<thead>
<tr>
<th>Page</th>
<th>Details about the Defense Mechanism</th>
<th>How This Helps the Animal Survive</th>
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<tbody>
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</table>
Criteria for Sketching:
It is based on your research this means...
- It has realistic coloring, shape, size, and habitat
- It has a descriptive and accurate caption that uses vocabulary from your research

<table>
<thead>
<tr>
<th>First Draft:</th>
<th>Second Draft:</th>
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<th>Caption:</th>
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<td>Third Draft</td>
<td>Fourth Draft</td>
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<td>Caption:</td>
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Copyright © 2013 by Expeditionary Learning, New York, NY. All Rights Reserved.
<table>
<thead>
<tr>
<th>Word/Phrase</th>
<th>Definition</th>
<th>Vocabulary strategy I used to learn this word:</th>
<th>Sketch/Diagram</th>
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</table>
**Expert Group Animal Research Journal:**
Mimic Octopus
Glossary

<table>
<thead>
<tr>
<th>Word/Phrase</th>
<th>Definition</th>
<th>Vocabulary strategy I used to learn this word:</th>
<th>Sketch/Diagram</th>
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</tbody>
</table>
Expert Group Animal Research Journal: Monarch Butterfly

Name: __________________________

Date: __________________________

Expert Group Animal Defense Mechanisms: KWL Chart

Focus question: How does the body and behaviors of your animal help it to survive?

<table>
<thead>
<tr>
<th>I THINK I KNOW ...</th>
<th>I WANT to know ...</th>
<th>I LEARNED ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>Y/N</td>
<td>Information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Source</td>
</tr>
</tbody>
</table>


Focus task: Describe your expert group animal.

**Directions:**
1. Look at the photograph on the top of your Web page.
2. In the first column of the graphic organizer below, record three details you see in the photograph.
3. In the second column of the graphic organizer, record the inferences you make based on these details.

**NOTE: Do NOT complete the right-hand column of the graphic organizer yet!**
4. Read the Web page.
5. In the right-hand column of the graphic organizer, record details from the Web page that support your inferences in the middle column.

<table>
<thead>
<tr>
<th>Details from the Photograph (explicit information)</th>
<th>My Inferences (what I infer about this animal)</th>
<th>Details in the Text That Support My Inferences (confirmed with explicit information)</th>
</tr>
</thead>
</table>
1. What is the gist of this Web page?

2. Use the arrows to scroll through the slideshow photographs at the top of the Web page. Then use details from the photographs to answer the question on the right.

What details do you see about the monarch in these photographs?

3. Now scroll through the slideshow videos. Use details from the videos to answer the question on the right.

What details do you see about the monarch in these videos?
<table>
<thead>
<tr>
<th>4. Scroll down and read the section titled “Monarch butterfly description.” Then use details from the text to answer the questions on the right.</th>
<th>What words does the author use to describe the monarch butterfly’s wings?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How do the monarch butterfly’s wings protect it?</td>
</tr>
<tr>
<td>5. What is the main idea of this section? Write it in the box on the right with your red pencil.</td>
<td></td>
</tr>
<tr>
<td>6. Scroll down and read the section titled “Monarch butterfly biology.” Then use details from the text to answer the questions on the right.</td>
<td>What do you think migration means? What words in the text make you think so?</td>
</tr>
<tr>
<td></td>
<td>When do the monarch butterflies migrate? Where do they migrate to?</td>
</tr>
<tr>
<td><strong>Continue reading the section titled “Monarch butterfly biology.” Then use details from the text to answer the questions on the right.</strong></td>
<td>What does <strong>feeding</strong> mean? What words in the text make you think so?</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td></td>
<td>List two things the monarch butterfly feeds on.</td>
</tr>
<tr>
<td>How does what the monarch caterpillar feed on protect it when it changes into a butterfly?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>7. What is the main idea of this section? Write it in the box on the right with your red pencil.</strong></th>
<th></th>
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<tbody>
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</table>

<table>
<thead>
<tr>
<th><strong>8. Scroll down and read the sections titled “Monarch butterfly range” and “Monarch butterfly habitat.” Use details from the text to answer the question on the right.</strong></th>
<th>What do you think <strong>habitat</strong> means? What words in the text make you think so?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What is the monarch butterfly’s habitat?</td>
</tr>
</tbody>
</table>
9. Now scroll back up to the photographs and video at the top of the Web page. Use details from the photographs and videos to answer the question on the right.

Describe the monarch butterfly’s habitat.

10. What is the main idea of these sections? Write it in the box on the right with your red pencil.

Pulling it all together ...

11. Using evidence from the text, sketch what the monarch butterfly does when a predator is near.
12. MAIN IDEA
Look back at the answers you wrote in red. What is the main idea of this Web page? Write it in the box on the right with your red pencil.

13. SUMMARY
After thinking more closely about your expert group’s Web page, summarize what you think this Web page is mostly about. Use several specific details from the Web page in your summary.
<table>
<thead>
<tr>
<th>14. WORD MEANING</th>
<th>Add the definitions of the words in bold to the glossary of your Expert Group Animal research journal.</th>
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<tbody>
<tr>
<td>Reread this research guide, noticing the words in bold print. Talk with your partner about three ways you might figure out the meaning of an unknown word. Then, follow the directions on the right.</td>
<td></td>
</tr>
</tbody>
</table>
Focus question: How does your expert group animal use its body and behaviors to help it survive?

1. Turn to the index of *Animal Behavior: Animal Defenses*.
2. Write the page numbers that have information about your expert group animal:

<p>| |</p>
<table>
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</table>

1. Turn to the index of *Venom*.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the page numbers that have information about your expert group animal:

<p>| |</p>
<table>
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1. Use the text features to skim *Award-Winning Survival Skills*.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the name of the section that has information about your expert group animal:

<p>| |</p>
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</table>

Skim the pages you noted above. List the defense mechanisms your expert group animal uses:
### Expert Group Animal Research Journal:  
Monarch Butterfly  
Research Note-Catcher

Source:  

<table>
<thead>
<tr>
<th>Page</th>
<th>Details about the Defense Mechanism</th>
<th>How This Helps the Animal Survive</th>
</tr>
</thead>
</table>
|      | • How does the animal use its body to survive?  
      | • How does the animal use its behavior to survive? |                                  |
### Details about the Defense Mechanism
- How does the animal use its body to survive?
- How does the animal use its behavior to survive?

### How This Helps the Animal Survive
Criteria for Sketching:
It is based on your research this means...
- It has realistic coloring, shape, size, and habitat
- It has a descriptive and accurate caption that uses vocabulary from your research

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<tr>
<td>Word/Phrase</td>
<td>Definition</td>
<td>Vocabulary strategy I used to learn this word:</td>
<td>Sketch/Diagram</td>
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## Expert Group Animal Research Journal:
Monarch Butterfly
Glossary

<table>
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<th>Word/Phrase</th>
<th>Definition</th>
<th>Vocabulary strategy I used to learn this word:</th>
<th>Sketch/Diagram</th>
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</table>
Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

<table>
<thead>
<tr>
<th>Supporting Learning Target</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can make inferences based on information from pictures and text from an online source.</td>
<td>Web Page research guide</td>
</tr>
<tr>
<td>I can support my inferences with details and examples from pictures and text from an online source.</td>
<td>Expert group text summary</td>
</tr>
<tr>
<td>I can find the meanings of unfamiliar words to help me better understand a text.</td>
<td></td>
</tr>
<tr>
<td>I can write a summary paragraph about my animal after closely reading a text.</td>
<td></td>
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</tbody>
</table>
# Agenda

<table>
<thead>
<tr>
<th>1. Opening</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Engaging the Reader: Entrance Ticket (5 minutes)</td>
<td>Students continue to work in expert groups to closely reread their Web page about their expert group animal. They will reference their Expert Animal Group research journal (see Lesson 2 Teaching Notes). This is a continuation of the work they started with these Web pages in Lesson 2. After their close reading, students use their compilation of ideas from their Web Page research guide to write a summary about their Web page. This work will prepare them for the Mid-Unit 2 Assessment.</td>
</tr>
<tr>
<td>B. Review Learning Targets (5 minutes)</td>
<td>Students also work with their expert animal groups to define unknown vocabulary words from their Web page.</td>
</tr>
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</table>

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<tr>
<th>2. Work Time</th>
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<tbody>
<tr>
<td>A. Close Read: Using a Web page to Research the Expert Group Animal (15 minutes)</td>
<td>Since students have experience with summarizing and because the four expert groups will use different Web pages, the teacher will not be able to support them through this research as intensively as in the Unit 1 lessons. It is expected that, because students have had practice with this process and because they can rely on their partners for help, they will be able to work more independently. If necessary, the teacher may wish to pull a small group of students to provide additional support.</td>
</tr>
<tr>
<td>B. Independent Practice: Writing a Summary (15 minutes)</td>
<td>In the Closing, students work to sketch their expert group animal and add a label or caption using one of the vocabulary words they identified and defined in Work Time C. Students will continue to return to these sketches throughout the unit.</td>
</tr>
<tr>
<td>C. Rereading an Informational Text: A Closer Look at Words (15 minutes)</td>
<td>In advance: Prepare the technology for Web page research.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Closing and Assessment</th>
<th></th>
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<tbody>
<tr>
<td>A. Sketching (5 minutes)</td>
<td>Post: What Do Researchers Do? and Close Readers Do These Things anchor charts, learning targets.</td>
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</table>

<table>
<thead>
<tr>
<th>4. Homework</th>
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<tbody>
<tr>
<td>A. Continue reading your independent reading book for this unit.</td>
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</table>
## Lesson Vocabulary

<table>
<thead>
<tr>
<th>Materials</th>
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</thead>
<tbody>
<tr>
<td>• Entrance ticket (one per student)</td>
</tr>
<tr>
<td>• What Do Researchers Do? anchor chart (begun in Unit 1, Lesson 2)</td>
</tr>
<tr>
<td>• Close Readers Do These Things anchor chart (begun in Module 1, Unit 1, Lesson 3)</td>
</tr>
<tr>
<td>• Web Page research guide (pages 2-8 of Expert Group Animal research journal)</td>
</tr>
<tr>
<td>• Expert Group Animal research journals (from Lesson 2; one per student and one to display)</td>
</tr>
<tr>
<td>• Computer (one per pair of students)</td>
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<td>• Equity sticks</td>
</tr>
<tr>
<td>• Vocabulary Strategies anchor chart (begun in Unit 1, Lesson 2)</td>
</tr>
<tr>
<td>• Expert Group Animal glossary (page 13-14 of Expert Group Animal research journal)</td>
</tr>
<tr>
<td>• Animal Defense Mechanisms Word Wall (from Unit 1, Lesson 3)</td>
</tr>
<tr>
<td>• Blank Word Wall cards (three index cards for each expert group)</td>
</tr>
<tr>
<td>• Sketch page (page 12 of Expert Group Animal research journal)</td>
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</tbody>
</table>
# Opening

## A. Engaging the Reader: Entrance Ticket (5 minutes)
- Distribute **entrance tickets** and explain that students will use the **What Do Researchers Do? anchor chart** to set a goal for today’s lesson as a scientist.
- Ask them to complete the entrance ticket.
- Circulate and support as needed. If necessary, prompt students by asking questions like:
  * “What’s something on the anchor chart that has been difficult for you during this module?”
- Collect entrance tickets.

## B. Review Learning Targets (5 minutes)
- Direct students’ attention to the learning targets and read them aloud:
  * “I can make inferences based on information from pictures and text from an online source.”
  * “I can support my inferences with details and examples from pictures and text from an online source.”
  * “I can find the meanings of unfamiliar words to help me better understand a text.”
  * “I can write a summary paragraph about my animal after closely reading a text.”
- Tell students that today they will continue to practice making inferences, determining the meaning of unfamiliar words, and summarizing using their Web page from Lesson 2.
- Review the learning targets and clarify as necessary.

# Meeting Students’ Needs

- Using entrance tickets allows you to get a quick check for understanding of the purpose for this module and instruction can be adjusted or tailored to students’ needs during the lesson or before the next lesson.
- Discussing and clarifying the language of learning targets helps build academic vocabulary.
A. Close Read: Using a Web page to Research the Expert Group Animal (15 minutes)

- Point out the Close Readers Do These Things anchor chart and remind students that they will be doing all of these things to closely read their expert group Web page:
  - Read small chunks of text slowly and think about the gist.
  - Reread each passage one sentence at a time.
  - Underline things that you understand or know about.
  - Circle or underline words that you do not know.
  - Talk with your partners about all of your good ideas.
  - State the gist or message of the paragraph in the margin.
  - Listen to the questions:
    - Go back to the text to find answers to questions.
    - Talk with your partners about the answers you find.

- Invite students to open to their Web Page research guide in their Expert Group Animal research journals and move as necessary to sit with their partners from the previous lesson.

- Ask them to open their web browser on their computer and type the Web page URL at the top of their research guide into the browser’s address bar. Remind students that they have been using this Web Page research guide and to help them learn and record notes about their expert group animal.

- Use equity sticks to call on a student to read the focus task at the top of the research guide:
  * “Describe your expert group animal.”

- Remind students that they should keep this question in mind while they work and that they will have a chance to answer it during this lesson.

- Using the Web Page research guide, invite students to continue rereading the remainder of their expert group’s Web page, using Think-Pair-Share and discussing the prompts with their partner. They should begin where they left off in Lesson 2, at the seventh row. Circulate and support as needed.
**Work Time (continued)**

**B. Independent Practice: Writing a Summary (15 minutes)**

- Remind students that both researchers and close readers write in order to process and synthesize what they have learned.
- Tell them they will be writing a summary of their expert group’s Web page. Remind them that they have written summaries in Unit 1 and they should use the same process. Tell students they will write their summaries on the lines on their Web Page research guides.
- To prepare students for this task, ask:
  - “What is a summary?”
  - “How is a summary paragraph usually structured?”
- Listen for responses like: “A summary tells the main points of a text” and “A summary paragraph usually starts with a topic sentence that tells the main idea of the text. Next are sentences that share details that support the main idea of the text, and it ends with a concluding sentence that sums up the paragraph.”
- Tell students that their summaries should follow this structure. Remind them that they kept track of the main idea of sections of their Web page on their research guides using red colored pencils. Ask:
  - “How can these main ideas help you write your summaries?”
- Listen for responses such as: “We can look at the main ideas of each section to help us figure out the main idea of the entire Web page.”
- Give students 10 minutes to write their summaries. Remind them to use the main idea and supporting details they identified in their research guides. Circulate and support as needed. Be sure to check in with those who struggled with writing a summary on the End of Unit 1 Assessment. Important elements to look for in their summaries are a topic sentence that states the main idea of their Web page and sentences that share details that support the main idea of their Web page.
- After 10 minutes, invite students to share their summaries with their expert groups. While they are sharing, ask them to compare their summary to their group mates’ summaries. Tell them to notice the following:
  - What is the main idea each person identified in his or her summary?
  - What details did each person use to support his or her main idea?
  - Did each person identify the same main idea? Why or why not?
  - Did each person use the same supporting details? Why or why not?

**Meeting Students’ Needs**

- Provide ELLs with a sentence starter or frame to aid in language production. For example, a sentence starter might be: “The main idea of this Web page is __________.”
### Work Time (continued)

<table>
<thead>
<tr>
<th>Work Time (continued)</th>
<th>Meeting Students' Needs</th>
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<tbody>
<tr>
<td>- After students have a chance to share with their expert groups, bring them back together whole class. Ask:</td>
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<tr>
<td>* “Did each person identify the same main idea in his or her summary? Why or why not?”</td>
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<tr>
<td>- Listen for responses such as: “Yes, because the main idea of the text doesn’t change from person to person depending on who reads it—it is always the same.”</td>
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<tr>
<td>- Ask:</td>
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<tr>
<td>* “Did each person use the same supporting details? Why or why not?”</td>
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<tr>
<td>- Listen for responses like: “No, some details were different, because you don’t include all of the details from a text in a summary and each person chose different ones to support the main idea he or she identified.”</td>
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</table>
### Work Time (continued)

**C. Rereading an Informational Text: A Closer Look at Words (15 minutes)**

- Explain that students will now reread their expert group text and practice figuring out the meaning of challenging words. Point out on the Close Readers Do These Things anchor chart that close readers read and reread texts many times in order to deeply understand it.
- Review the Vocabulary Strategies anchor chart (from Unit 1, Lesson 2) and use equity sticks to call on students to read the strategies listed on the chart.
- Ask them to share with their expert groups:
  * “What strategy do you use most often to figure out what a word means?”
- Tell students that they now are going to practice some of these strategies while rereading their expert group text to determine the meaning of some challenging words.
- Explain that they will choose at least three words in bold in their Web Page research guides to define and record in their Expert Group Animal glossary on pages 13–14 of their Expert Group Animal research journals. Remind students that they did this in their Animal Defenses research journal for Unit 1.
- Invite students to open to the Expert Group Animal glossary in the back of their Expert Group Animal research journals. Ask:
  * “What did we do when recording a word in the glossary of our Animal Defenses research journals?”
- Listen for responses like: “We found the word we were defining in the glossary, then wrote the definition, then wrote the vocabulary strategy we used to determine the meaning of that word, and then drew a quick sketch or diagram showing what that word means.”
- Explain that the only difference with this glossary is that these glossaries are blank, unlike those in Unit 1, where the words were typed. Explain that in this unit students will choose their own words to add to the glossaries in their Expert Group Animal research journals. Tell students that because of this, their words for this glossary will not be in alphabetical order since they will add words as they research.

### Meeting Students’ Needs

- Asking students to identify challenging vocabulary helps them monitor their understanding of a complex text. When they annotate the text by circling these words, it can also provide a formative assessment for the teacher.
Work Time (continued)

• Post and review these directions with students:

  – Find the meaning of at least three words in bold in your Web Page research guide.
    1. With your partner, determine the meaning of at least three words from your expert group Web page.
    2. Write each word and its definition, the strategy you used to figure out the meaning, and a sketch representing the word.
    3. Reread the text with your group.
    4. Discuss these questions: How has your understanding of these words changed? Which words are still confusing for you and why?

• If necessary, review Steps 1 and 2 briefly by saying something like:

  * “Let’s review how we did this in Unit 1 with the word ‘predator.’ First we flipped through the glossary until we found it. Remember that with this science journal, we’ll just write it in the first available row. Then we wrote the definition of the word. We figured out that it meant an animal that lives by killing and eating another animal, so that’s what we wrote in the Definition box. Then we thought about what vocabulary strategy we used to figure out the meaning of that word. We read on in the article and did some inferring and figured out what it meant. So I wrote ‘reading on in the text and infer’ in the Vocabulary Strategy I Used to Learn This Word box. The last thing we did was a quick sketch showing what this word meant. I drew a sketch of an armadillo and a jaguar, since that was an example from the article, and I drew an arrow pointing to the jaguar, since that’s the predator in the sketch.”

• Give students 10 minutes to find at least three words from their texts, record their definitions and strategy used, draw sketches, and discuss their understanding.

• Circulate and support pairs as needed. If necessary, ask questions such as:

  * “How did you figure out the meaning of that word?”
  * “Are there any clues in the article that can help you figure out what that word means?”

• Listen for students to discuss the meanings of the words and use strategies from the Vocabulary Strategies anchor chart when determining the meanings.

• Cold call groups to share words they added to their glossaries and visuals/notes for each word. Clarify definitions as necessary.

• Point out the **Animal Defense Mechanisms Word Wall**. Remind students that the Word Wall has five sections—one for general animal defense mechanisms that they used in Unit 1, and one for each of the four expert group animals. Tell students that they will now start using the expert group animal sections of the Word Wall.
**Work Time (continued)**

- Distribute three **blank Word Wall cards** to each expert group.
- Invite groups to write the words they added to their glossary on their Word Wall cards.
- Ask each group to designate one representative to bring their cards and post them to their group’s section of the Word Wall.

**Closing and Assessment**

<table>
<thead>
<tr>
<th>A. Sketching (5 minutes)</th>
<th>Meeting Students’ Needs</th>
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<tbody>
<tr>
<td>Focus students’ attention and invite them to turn to the <strong>Sketch page</strong> on page 12 in their Expert Group Animal research journals and display a copy with the document camera.</td>
<td>Varying the methods of response for students makes the task accessible for all. By sketching, some students may be able to convey understanding of the content that they may not be able to convey in other ways.</td>
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<tr>
<td>Explain to students that this page is to help them think about their animal’s characteristics and practice drawing for their illustrations for their performance task.</td>
<td>Consider displaying a few color photos for each expert group for students to refer to as they practice sketching throughout the unit.</td>
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<tr>
<td>Ask students:</td>
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<tr>
<td>* What do you notice about the criteria for these sketches?</td>
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<td>* Listen for students to notice that it is based on their research; it is realistic.</td>
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<td>Explain to students that these sketches are a visual way to show their knowledge about their animal and its defense mechanisms. Reassure them that the purpose is not have the most beautiful or artistic drawing, but one that communicates important information about their animal (what it looks like, where it lives, how it protects itself).</td>
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<tr>
<td>Tell students that you would like them to do a quick sketch for their first draft from an image on their Web page to help them with the details of their sketch with their pencils.</td>
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</table>

**Homework**

- Finish your first draft sketch and write a caption using at least one vocabulary word from your glossary.
Using the What Do Researchers Do? anchor chart, set a goal for today’s lesson. What will you try do as a researcher that has been difficult for you in other lessons? Be specific. Give an example to support your response.
Grade 4: Module 2B: Unit 2: Lesson 4
Reading Informational Texts: Researching Expert Group Animals
Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can explain what a text says using specific details from the text. (RL.4.1)
I can make inferences using specific details from the text. (RL.4.1)

<table>
<thead>
<tr>
<th>Supporting Learning Target</th>
<th>Ongoing Assessment</th>
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<tbody>
<tr>
<td>• I can make inferences based on information from pictures and text.</td>
<td>• Expert Group Animal Defense Mechanisms: KWL chart</td>
</tr>
<tr>
<td>• I can support my inferences with details and examples from pictures and texts.</td>
<td>• Research note-catcher</td>
</tr>
<tr>
<td>• I can find the meanings of unfamiliar words to help me better understand a text.</td>
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<tr>
<td>Agenda</td>
<td>Teaching Notes</td>
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<td>------------------------------------</td>
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<tr>
<td>1. Opening</td>
<td>- This lesson opens with a Jigsaw activity, in which students learn about the other expert groups’ animals.</td>
</tr>
<tr>
<td>A. Engaging the Reader: Jigsaw (10 minutes)</td>
<td>- Similar to Lesson 1, Work Time is broken up into two sections: teacher modeling and guided practice. Students use the Research note-catcher and their Expert Group Animal research journals to identify which sources they will use for their research. Then, they closely read targeted sections of those identified sources to research how their animal’s body and behaviors help it to survive. Students do this work in their expert groups, and their findings will help them write the informational page of the performance task.</td>
</tr>
<tr>
<td>B. Review Learning Targets (5 minutes)</td>
<td>- This lesson are differs from previous research students have done because they are self-identifying texts (and sections of these texts) to use in their research rather than reading Web-based texts assigned to their group.</td>
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<tr>
<td>2. Work Time</td>
<td>- The only expert group that will use Venom for this part of the research is the group researching the monarch butterfly. Since there is only one copy of this text per class, this expert group can use the text by having one student read it aloud while the rest of the group takes notes.</td>
</tr>
<tr>
<td>A. Identifying Research Sources (15 minutes)</td>
<td>- Recall that the gazelle was assigned to students who generally need extra support with reading and research tasks. The gazelle’s defense mechanisms should be identified for these students to provide this extra scaffold. You may choose to assign the defense mechanisms for other expert groups, as well, based on student need.</td>
</tr>
<tr>
<td>B. Researching the Expert Group Animal (25 minutes)</td>
<td>- The research completed in Work Time B may take more than 25 minutes; you may wish to have students do the Jigsaw activity at a different time in the day to allow for more time for research during the lesson itself. Students will have an opportunity to continue researching in Lesson 5.</td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td>- Review: Jigsaw protocol (see Appendix).</td>
</tr>
<tr>
<td>A. KWL: Expert Group Animal (5 minutes)</td>
<td>- Post: Performance Task and Close Readers Do These Things anchor charts; learning targets.</td>
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<tr>
<td>4. Homework</td>
<td></td>
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<tr>
<td>A. Expert group text vocabulary.</td>
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### Lesson Vocabulary

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<tr>
<th>Materials</th>
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<tbody>
<tr>
<td>• Equity sticks</td>
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<tr>
<td>• Performance Task anchor chart (begun in Unit 1, Lesson 1)</td>
</tr>
<tr>
<td>• Expert Group Animal research journals (from Lesson 2; one per student and one to display)</td>
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<tr>
<td>• Close Readers Do These Things anchor chart (begun in Module 1, Unit 1, Lesson 3)</td>
</tr>
<tr>
<td>• Research note-catcher (pages 9-11 of Expert Group Animal research journal)</td>
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<tr>
<td>• Research note-catcher (answers; for teacher reference; one per expert group animal)</td>
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<tr>
<td>• Venom (book; see Teaching Notes)</td>
</tr>
<tr>
<td>• Animal Behavior: Animal Defenses (book; from Unit 1, Lesson 5; one per student and one to display)</td>
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<tr>
<td>• “Award-Winning Survival Skills” (from Unit 1, Lesson 2; one per student and one to display)</td>
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<tr>
<td>• Millipede Research note-catcher (one for modeling)</td>
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<tr>
<td>• Millipede Research note-catcher (answers, for teacher reference)</td>
</tr>
<tr>
<td>• Expert Group Animal Defense Mechanisms: KWL chart (page 1 of Expert Group Animal research journal)</td>
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</tbody>
</table>
**Opening**

<table>
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<tr>
<th>A. Engaging the Reader: Jigsaw (10 minutes)</th>
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<tbody>
<tr>
<td>• Explain that students will use the Jigsaw protocol to “meet” the other animals being studied by the other expert groups. Clarify the protocol as necessary.</td>
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<tr>
<td>• Invite students to gather into Jigsaw groups of four, made up of one person from each expert group.</td>
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<tr>
<td>• Ask students to describe their expert group animal to their Jigsaw group, giving each “expert” a chance to share. Remind them to use details from their research so far to support their answers.</td>
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<tr>
<td>• Refocus students whole group. Use <strong>equity sticks</strong> to call on them to describe one of their Jigsaw group mates’ animal.</td>
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<tr>
<td>• Discussing and clarifying the language of learning targets helps build academic vocabulary.</td>
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<tr>
<th>B. Review Learning Targets (5 minutes)</th>
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<tr>
<td>• Remind students of the module’s guiding question:</td>
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<tr>
<td>* “How do animals’ bodies and behaviors help them survive?”</td>
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<tr>
<td>• Invite them to give a thumbs-up if they can answer this question with an example of how their expert group animal uses its body or behaviors to survive, and a thumbs-down if they cannot.</td>
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<tr>
<td>• Direct students’ attention to the learning targets. Read them aloud, pausing after each to ask for a thumbs-up if students are clear on what they will be expected to do, a thumbs sideways if they understand part but not all of what to do, and a thumbs-down if they are very unsure about what they should do.</td>
</tr>
<tr>
<td>* “I can make inferences based on information from pictures and text.”</td>
</tr>
<tr>
<td>* “I can support my inferences with details and examples from pictures and texts.”</td>
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<td>* “I can find meanings of unfamiliar words to help me better understand a text.”</td>
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<tr>
<td>• Explain that students will begin reading a new text closely to learn about their expert group animal’s defense mechanisms.</td>
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## Work Time

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<tr>
<th>A. Identifying Research Sources (15 minutes)</th>
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<tr>
<td>Display the <strong>Performance Task anchor chart</strong> and remind students that there are two parts to the performance task. They will complete the first part, an informational page about their expert group animal, in this unit. The second part, a narrative featuring their expert group animal, will be completed in Unit 3.</td>
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<td>Remind students that they need to research to learn more about their expert group animal before they can begin writing about the animal for the performance task.</td>
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<td>Ask: “What does it mean to research?”</td>
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<td>Listen for responses such as: “It means to ask a question and then look for the answer in different sources like books, articles, or videos.”</td>
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<td>Ask: “What is the question we are trying to answer in our research?”</td>
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<tr>
<td>Listen for students to share the focus question for the informational page: “How does my expert group animal use its body and behaviors to help it survive?”</td>
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<tr>
<td>Use equity sticks to call on a student to read the second bullet point on the Performance Task anchor chart aloud:</td>
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<td>* “An informational page with a physical description of your animal, its habitat, its defense mechanisms, and predators”</td>
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<tr>
<td>Ask students to turn and talk with a partner. Encourage them to talk with someone who is not in their expert group. Ask:</td>
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<td>* “What information have you learned about your expert group animal so far that will help you to do this? Share some facts with your partner.”</td>
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<tr>
<td>Listen for students to share details about what their animal looks like, where it lives, and its predators.</td>
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<tr>
<td>Invite them to take their <strong>Expert Group Animal research journals</strong> and join their expert groups to discuss:</td>
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<tr>
<td>* “Based on the anchor chart, what kind of information do you still need to research?”</td>
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<tr>
<td>Listen for them to notice that they need to learn more about their animal’s defense mechanisms.</td>
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<tr>
<td>Explain that, as in Lessons 2 and 3, students will reread new texts several times over the next two lessons to learn about their expert group animal’s defense mechanisms.</td>
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Work Time (continued)

- Point out the Close Readers Do These Things anchor chart and remind students that they will be doing all of these things to read closely in the next two lessons.
- Ask expert groups to discuss:
  * “What is one thing you are going to practice today when you closely read your group’s text?”
  * Listen for responses like: “I’m going to be sure I underline things that I understand in the text.”
- Invite students to turn to the Research note-catcher on pages 9-11 in their Expert Group Animal research journal. Explain that they will use this note-catcher to help them think and take notes about their expert group’s text.
- Use equity sticks to call on a student to read the focus question at the top of the Research note-catcher:
  * “How does your expert group animal use its body or behaviors to help it survive?”
- Tell students that they should keep this question in mind while they work. Explain that they are going to take their research skills to the next level; before they start researching, they will practice using text features to efficiently find information about their expert group animals. Tell students they will use the Web pages and anchor texts from this module for their research.
- Ask:
  * “What texts can you use for further research of your expert group animal?”
- Listen for responses such as: “Venom, Animal Behavior: Animal Defenses, or ‘Award-Winning Survival Skills.’”
- Ask:
  * “What text features are in these resources that will help us to locate information about our expert group animals?”
- Listen for students to identify text features such as the table of contents, the index, headings, or photographs. If necessary, prompt them by reminding them how you found information about the millipede in Unit 1. Model with the Millipede Research note-catcher (For Modeling) as necessary.
- Review the protocol for working in a small group by asking:
  * “What does it look like or sound like when working in a small group with your peers?”
- Listen for responses like: “Wait my turn to speak, so I am heard,” “Don’t shout/speak too loudly,” “Make sure everyone gets a turn to speak,” “No one person does most/all of the speaking,” and “Use information from the text to support my ideas.”
**Work Time (continued)**

- Turn students’ attention back to the Research note-catcher. Invite expert groups to complete the task in the first row:
  
  * “Turn to the index of *Animal Behavior: Animal Defenses*. Write the page numbers that have information about your expert group animal.”

- If necessary, model briefly using the millipede as an example using the **Millipede Research note-catcher (answers, for teacher reference)**. Answer any clarifying questions.

- Repeat with the second row of the Research note-catcher, answering any clarifying questions. Be sure to note for students that their expert group animal may not be mentioned in *Venom* or “Award-Winning Survival Skills,” and they should write “no” if that is the case for their animal.
Work Time (continued)

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**B. Researching the Expert Group Animal (25 minutes)**

- Explain that students will now work with their expert groups to research the answer to the focus question (“How does my expert group animal use its body and behaviors to help it survive?”) by using the resources they identified in Work Time A.

- Guide students in using the third row of the Research note-catcher with the prompt:
  * “Skim the pages you noted above. List the defense mechanisms your expert group animal uses.”

- Model doing this with the millipede, turning to page 53 of *Animal Behavior: Animal Defenses*. As you model, be sure to:
  - Use the page numbers recorded in Work Time A.
  - Skim the text by starting with looking at the pictures and captions and looking for the word “millipede.”
  - Record the defense mechanism in the appropriate box on the note-catcher.

- Invite students to complete the third row of the Research note-catcher with their expert groups.

- After about 10 minutes, bring students back together. Say something like:
  * “Now that you have a list of defense mechanisms for your expert group animal, you’ll be able to return to the texts and read the pages you noted in Row 1 more closely to learn exactly how your expert group animal uses these defense mechanisms.”

- Direct students’ attention to the Performance Task anchor chart and point out that they will be writing about two defense mechanisms. Explain that their expert group animal may use many defense mechanisms to protect itself, but they will only deeply research two defenses.

- Invite students to turn to the second and third pages of the Research note-catcher (page 10 and 11 in their research journals).

- They may use one or both of these pages depending on how many texts they identified on the first page of their Research note-catchers.

- Ask students to read over the second page of the note-catcher. Answer any clarifying questions.
### Work Time (continued)

- Model how to complete table for notes on the second page of the Research note-catcher with the Millipede Research note-catcher, turning to page 53 of *Animal Behavior: Animal Defenses*. As you model, be sure to:
  - Notice the heading in the upper-right corner of the page of *Animal Behavior: Animal Defenses* and think aloud about what it means, why it is there, and how it helps you as a reader.
  - Use the chapter title and headings to frame what you will be rereading.
  - Reread the page, looking for information about millipede defense mechanisms and writing details on the Millipede Research note-catcher (see the supporting materials for possible notes).
  - Think aloud about how the defense mechanism helps the millipede survive.
  - Note the page number in the appropriate column on the note-catcher.

- Using the Research note-catcher, guide students through reading the parts of their texts that they identified in Work Time A, inviting them to Think-Pair-Share and discuss with their expert groups. Circulate and support groups as needed.

- After about 7 minutes, bring students back together whole group. Explain that they will continue researching in the next lesson.

### Meeting Students’ Needs

- Some students may benefit from having key sections pre-highlighted in their texts. This will help them focus on small sections rather than scanning the whole text for answers.

- Note: Students researching the Springbok gazelle will only gather information from one text in their Research note-catchers, *Animal Behaviors: Animal Defenses*. 
### Closing and Assessment

#### A. KWL: Expert Group Animal (5 minutes)

- Invite students to turn to the **Expert Group Animal Defense Mechanisms: KWL chart** on page 1 of their Expert Group Animal research journals. Remind them that researchers always reflect on and record what they've learned.

- Invite students to Think-Pair-Share. Ask:
  - “Were any of the questions from your KWL chart answered in the text that you read today?”
  - “Did you confirm any of the information you thought you knew?” (Instruct students to place a check mark next to these facts on their KWL charts.)
  - “What new information did you learn from your section of the text?”

- Tell students to record the answers to any questions they wrote in the W column, in the I Learned section, in the Information column. Include the name of the book and page number in the Source column.

- Tell students to write one new piece of information they learned from the book in the I Learned section, as well.

### Homework

- Reread the sections of the texts that your expert group used in this lesson. While you read, write down words that you do not know the meaning of. Choose one word you wrote down and try to figure out its definition. Write down the definition and how you figured out what the word meant.
Focus question: How does your expert group animal use its body and behaviors to help it survive?

1. Turn to the index of *Animal Behavior: Animal Defenses*.
2. Write the page numbers that have information about your expert group animal:

1. Turn to the index of *Venom*.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the page number(s) that have information about your expert group animal:

1. Use the text features to skim *Award-Winning Survival Skills*.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the name of the section that has information about your expert group animal:

Skim the pages you noted above. List the defense mechanisms your expert group animal uses:
Millipede Research Note-Catcher:
(For Modeling)

Source: 

<table>
<thead>
<tr>
<th>Page</th>
<th>Details about the Defense Mechanism</th>
<th>How This Helps the Animal Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- How does the animal use its body to survive?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- How does the animal use its behavior to survive?</td>
<td></td>
</tr>
</tbody>
</table>
Focus question: How does your expert group animal use its body and behaviors to help it survive?

1. Turn to the index of *Animal Behavior: Animal Defenses*.
2. Write the page numbers that have information about your expert group animal:

<table>
<thead>
<tr>
<th>53</th>
<th>56–57</th>
<th>64–65</th>
</tr>
</thead>
</table>

1. Turn to the index of *Venom*.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the page number(s) that have information about your expert group animal:

yes, page 15  

1. Use the text features to skim *Award-Winning Survival Skills*.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the name of the section that has information about your expert group animal:

no

Skim the pages you noted above. List the defense mechanisms your expert group animal uses:

- rolling into a ball
- hard exoskeleton
- emits poison
- runs away
Source: *Animal Behavior: Animal Defenses*

<table>
<thead>
<tr>
<th>Page</th>
<th>Details about the Defense Mechanism</th>
<th>How This Helps the Animal Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td>53</td>
<td>Pill millipedes roll up when in danger.</td>
<td>Their hard exoskeleton protects millipedes’ bodies from predators. They look like little pebbles so the predator ignores them.</td>
</tr>
<tr>
<td>56</td>
<td>Pill millipedes ooze sticky droplets when attacked.</td>
<td>The droplets stick to predators. While the predator tries to clean off the fluid, it gets stickier and the millipede escapes.</td>
</tr>
<tr>
<td>56</td>
<td>Some millipedes ooze droplets that release poison.</td>
<td>The poison can paralyze or kill the millipede’s predators.</td>
</tr>
<tr>
<td>64–65</td>
<td>Millipedes give off strong odors if they are disturbed. The smell comes from fluids that ooze from pores in the millipede’s sides.</td>
<td>The scent sends the predators running away.</td>
</tr>
</tbody>
</table>
### Source: Venom

<table>
<thead>
<tr>
<th>Page</th>
<th>Details about the Defense Mechanism</th>
<th>How This Helps the Animal Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>have a tough exoskeleton</td>
<td>protects its body from predators</td>
</tr>
</tbody>
</table>
| 15   | Rolling into a tight, hard ball is their main defense. | Their hard exoskeleton protects their bodies from predators.  
|      |                                    | They look like little pebbles, so the predator ignores them. |
| 15   | The yellow-spotted millipede emits acid to repel predators. | The acid keeps the predators away and can hurt the predators. |
Focus question: How does your expert group animal use its body and behaviors to help it survive?

<table>
<thead>
<tr>
<th>Task</th>
<th>Information</th>
<th>Page numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Turn to the index of <em>Animal Behavior: Animal Defenses.</em></td>
<td></td>
<td>49–51, 53</td>
</tr>
<tr>
<td>2. Write the page numbers that have information about your expert group animal:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. If “yes,” write the page numbers that have information about your expert group animal:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Turn to the index of <em>Venom.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Can this resource help you answer the focus question? Write “yes” or “no.”</td>
<td></td>
<td>“no”</td>
</tr>
<tr>
<td>3. If “yes,” write the page numbers that have information about your expert group animal:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Use the text features to skim <em>Award-Winning Survival Skills.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Can this resource help you answer the focus question? Write “yes” or “no.”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. If “yes,” write the name of the section that has information about your expert group animal:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Skim the pages you noted above. List the defense mechanisms your expert group animal uses:

- bony armor
- roll into a ball
<table>
<thead>
<tr>
<th>Page</th>
<th>Details about the Defense Mechanism</th>
<th>How This Helps the Animal Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>Scientists call the armor carapace.</td>
<td>The armor is hard and protects the armadillo’s body if a predator attacks it.</td>
</tr>
<tr>
<td>50</td>
<td>Carapace is made up of bony plates arranged in bands around the armadillo’s body.</td>
<td>The armor is hard and protects the armadillo’s body if a predator attacks it.</td>
</tr>
<tr>
<td>50</td>
<td>The plates are covered by tough skin.</td>
<td>The armor is hard and protects the armadillo’s body if a predator attacks it.</td>
</tr>
<tr>
<td>50</td>
<td>Each band is separated from the others by a band of skin.</td>
<td>This lets the armadillo flex its body.</td>
</tr>
</tbody>
</table>
| 50   | The three-banded armadillo is the only armadillo that can roll itself up so tightly that it looks like a scaly croquet ball. | “can roll away
–natural hiding spot
–“can peek out and see if its attacker is still there. If the attacker comes close to investigate, the armadillo quickly slams its carapace shut again—an action that sometimes nips the attacker’s nose.” |
Source: “Award-Winning Survival Skills”

<table>
<thead>
<tr>
<th>Page</th>
<th>Details about the Defense Mechanism</th>
<th>How This Helps the Animal Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Three hinged bands give them the flexibility to roll themselves up. They are the only armadillos that can curl themselves into completely enclosed balls.</td>
<td>When they’re rolled into a ball, the shell protects their bodies. It’s also difficult for the predator to crack open the armadillo.</td>
</tr>
<tr>
<td>10</td>
<td>The shoulder and haunch plates aren’t attached on the sides to the armadillos’ skin, so there’s room inside to fit a head, legs, and tail.</td>
<td>Rolling into a ball lets the armadillo’s armor protect its body and also its head, legs, and tail, which aren’t covered by the armor otherwise.</td>
</tr>
<tr>
<td>10</td>
<td>Shells are good insulation.</td>
<td>They keep the armadillos warm in the winter.</td>
</tr>
</tbody>
</table>
Focus question: How does your expert group animal use its body and behaviors to help it survive?

2. Write the page numbers that have information about your expert group animal:
   7–9
   64
   114

1. Turn to the index of Venom.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the page numbers that have information about your expert group animal:
   no

1. Use the text features to skim Award-Winning Survival Skills.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the name of the section that has information about your expert group animal:
   no

Skim the pages you noted above. List the defense mechanisms your expert group animal uses:

- horn
- keen senses
- speed
- avoiding being seen
- stotting or stamping
- running away
- forming mixed groups when traveling
**Source:** *Animal Behavior: Animal Defenses*

<table>
<thead>
<tr>
<th>Page</th>
<th>Details about the Defense Mechanism</th>
<th>How This Helps the Animal Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>“The gazelles bounce like pogo sticks. They spring high in the air with their backs arched and legs stiff. They land on all fours, and then leap again.”</td>
<td>This lets the predator know: “We have seen you, so do not bother to chase us—we are strong and healthy and can outrun you.”</td>
</tr>
<tr>
<td>7</td>
<td>They run up to 40 miles an hour.</td>
<td>They can run this fast longer than predators, which get tired out and give up chasing the gazelle.</td>
</tr>
<tr>
<td>8</td>
<td>Fawns have tawny coats.</td>
<td>They blend in with the grass so the predator doesn’t see them.</td>
</tr>
<tr>
<td>8</td>
<td>Fawns can lie still for a long time.</td>
<td>The grass doesn’t move around them, so the predator doesn’t notice them.</td>
</tr>
<tr>
<td>9</td>
<td>“Gazelle fawns use the most basic form of self-defense: avoid being noticed. Like the fawns, many animals evade detection by hiding, freezing, or blending in with their habitat. This is called crypsis.”</td>
<td>The fawns blend in with their habitat so the predator doesn’t notice them.</td>
</tr>
<tr>
<td>65</td>
<td>The gazelle stamps its foot or stots.</td>
<td>The predator loses its chance to launch a surprise attack. This is also a form of pursuit deterrence—telling a predator that it is strong and healthy, so it would be a waste of time to chase it.</td>
</tr>
</tbody>
</table>
Focus question: How does your expert group animal use its body and behaviors to help it survive?

1. Turn to the index of *Animal Behavior: Animal Defenses*.
2. Write the page numbers that have information about your expert group animal:

   - **mimic octopus:** 97
   - octopuses:
     - 19
     - 24
     - 28–29
     - 33–34
     - 37
     - 87
     - 97

1. Turn to the index of *Venom*.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the page numbers that have information about your expert group animal:

   - no

1. Use the text features to skim *Award-Winning Survival Skills*.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the name of the section that has information about your expert group animal:

   - yes, “Best Impersonator: The mimic octopus”

Skim the pages you noted above. List the defense mechanisms your expert group animal uses:

- changes color to blend in
- changes texture of skin
- mimics other animals
- jets away (swimming away quickly)
- changes color to scare away the predator
- loses arms
- squirts ink
- uses venom
# Expert Group Animal: Mimic Octopus

## Details about the Defense Mechanism

- **How does the animal use its body to survive?**
  - can change color in less than one second
  - can change texture of skin
  - escapes predators by jetting: filling body with water and pushing it out through a tube-like body part called a siphon
  - releases arms
  - mimics other animals
    - easily changes color and shape of body
    - imitates dangerous sea creatures
    - pulls arms together and moves like the sole
    - spreads out arms and lets them dangle to look like a lionfish
    - changes stripes to black and yellow and tucks body to look like a sea snake

- **How does the animal use its behavior to survive?**
  - uses venom if stepped on or attacked
  - mimics other animals
    - easily changes color and shape of body
    - imitates dangerous sea creatures
    - pulls arms together and moves like the sole
    - spreads out arms and lets them dangle to look like a lionfish
    - changes stripes to black and yellow and tucks body to look like a sea snake

## How This Helps the Animal Survive

- can change color to match the background
- texture resembles sand or stones, so it blends in
- can get away quickly and in any direction; squirts ink to hide or confuse its enemy
- arm distracts the predator and lets the octopus escape
- hurts enemy with the venom
- imitates dangerous sea creatures
Source: “Award-Winning Survival Skills”

<table>
<thead>
<tr>
<th>Page</th>
<th>Details about the Defense Mechanism</th>
<th>How This Helps the Animal Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>twists its body and changes its stripes to look like the poisonous lionfish</td>
<td>The animals stay away from the mimic octopus when it looks like that because they think it’s a lionfish.</td>
</tr>
<tr>
<td>10</td>
<td>can bulge its eye sockets and tentacles to look like a blenny species</td>
<td>Blenny species are very common, so the predators aren’t interested in them.</td>
</tr>
<tr>
<td>11</td>
<td>is the only animal that can mimic more than one animal – has a flexible body – has skin cells called chromatophores that have different colored pigments, so it can change the color of its skin</td>
<td>There’s nowhere for the octopus to hide because its habitat is the seafloor, so this helps it hide in plain sight.</td>
</tr>
</tbody>
</table>
Focus question: How does your expert group animal use its body and behaviors to help it survive?

2. Write the page numbers that have information about your expert group animal:

56 60 68 105–106

1. Turn to the index of Venom.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the page numbers that have information about your expert group animal:

yes, 21–22

1. Use the text features to skim Award-Winning Survival Skills.
2. Can this resource help you answer the focus question? Write “yes” or “no.”
3. If “yes,” write the name of the section that has information about your expert group animal:

no

Skim the pages you noted above. List the defense mechanisms your expert group animal uses:

warning colors
poison
mimicry
**Source:** *Animal Behavior: Animal Defenses*

<table>
<thead>
<tr>
<th>Page</th>
<th>Details about the Defense Mechanism</th>
<th>How This Helps the Animal Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td>56</td>
<td>The poison tastes bad.</td>
<td>The predator will drop the butterfly once it tastes the poison because it tastes bad, and the butterfly then escapes.</td>
</tr>
<tr>
<td>56</td>
<td>The poison doesn’t kill the monarch’s enemy, but it makes the enemy sick.</td>
<td>The predator remembers that it made it sick and avoids catching monarchs again.</td>
</tr>
<tr>
<td>60</td>
<td>The white, black, and yellow caterpillar of the monarch butterfly is poisonous.</td>
<td>The bright colors warn predators that the monarch is poisonous, so they stay away.</td>
</tr>
<tr>
<td>68</td>
<td>Monarch butterflies get their poison from eating milkweed plants.</td>
<td>Monarchs stock up on the poison when they’re caterpillars, and the poison stays in them after they turn into butterflies. The poison doesn’t harm the caterpillars, but it is harmful to many other animals, including the monarchs’ predators.</td>
</tr>
<tr>
<td>105</td>
<td>The monarch is orange, black, and white.</td>
<td>The bright colors warn predators that the monarch is poisonous, so they stay away.</td>
</tr>
</tbody>
</table>
## Source: Venom

<table>
<thead>
<tr>
<th>Page</th>
<th>Details about the Defense Mechanism</th>
<th>How This Helps the Animal Survive</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>“These colors and patterns are aposematic—they warn enemies that these critters are venomous.”</td>
<td>The bright colors warn predators that the monarch is poisonous, so they stay away.</td>
</tr>
<tr>
<td>21</td>
<td>“Birds and other beings that taste this butterfly learn from its Halloween colors that they don’t want a second bite.”</td>
<td>The predators learn to stay away from the butterflies because of their colors.</td>
</tr>
<tr>
<td>21</td>
<td>“The poison is generally not strong enough to kill predators. It makes more sense for the survival of a species to sicken, not slaughter enemies so they’ll learn to avoid this prey in the future.”</td>
<td>Predators can learn to avoid a certain type of animal because they know it will make them sick.</td>
</tr>
</tbody>
</table>
Grade 4: Module 2B: Unit 2: Lesson 5
Reading Informational Texts: Researching Expert Group Animals and Collecting Vocabulary
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can explain what a text says using specific details from the text. (RI.4.1)
- I can make inferences using specific details from the text. (RI.4.1)
- I can accurately synthesize information from two texts on the same topic. (RI 4.9)

### Supporting Learning Target

<table>
<thead>
<tr>
<th>Supporting Learning Target</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can make inferences based on information from pictures and text.</td>
<td>• Research note-catcher</td>
</tr>
<tr>
<td>• I can support my inferences with details and examples from pictures and texts.</td>
<td>• Expert Group Animal Defense Mechanisms glossary</td>
</tr>
<tr>
<td>• I can find the meanings of unfamiliar words to help me better understand a text.</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Agenda</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Opening</td>
<td>• In this lesson, students spend the majority of Work Time continuing their research on their expert group animal’s defense mechanisms using the Research note-catcher started in Lesson 4. Similar to Lesson 4, this work is completed in their expert groups.</td>
</tr>
<tr>
<td>A. Engaging the Reader: Sketching (8 minutes)</td>
<td></td>
</tr>
<tr>
<td>B. Review Learning Targets (2 minutes)</td>
<td></td>
</tr>
<tr>
<td>2. Work Time</td>
<td>• During Work Time B, students switch gears to focus on vocabulary words from their research texts. Words for each expert group have been identified, but additional words may be added based on student needs. You may also wish to have students add words identified for homework after Lesson 4.</td>
</tr>
<tr>
<td>A. Researching the Expert Group Animal (30 minutes)</td>
<td></td>
</tr>
<tr>
<td>B. Rereading an Informational Text: A Closer Look at Words (15 minutes)</td>
<td></td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td>• In advance: Post: Vocabulary Strategies and Close Readers Do These Things anchor charts; learning targets.</td>
</tr>
<tr>
<td>A. Sharing (5 minutes)</td>
<td></td>
</tr>
<tr>
<td>4. Homework</td>
<td></td>
</tr>
<tr>
<td>A. Continue reading your independent reading book for this unit.</td>
<td></td>
</tr>
<tr>
<td>Lesson Vocabulary</td>
<td>Materials</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>herd (7), stotting (8), resemble (19), dispose (33),</td>
<td>• Expert Group Animal research journals (from Lesson 2; one per student and one to display)</td>
</tr>
<tr>
<td>armor (49), flex (50), burrows, investigate, warning</td>
<td>• Sketch page (page 12 of Expert Group Animal research journal)</td>
</tr>
<tr>
<td>colors (60), mimic (97), imitate, common (105),</td>
<td>• Equity sticks</td>
</tr>
<tr>
<td>migrate (114)</td>
<td>• Research note-catcher (pages 9-11 of Expert Group Animal research journal)</td>
</tr>
<tr>
<td></td>
<td>• Animal Behavior: Animal Defenses (book from Unit 1, Lesson 5; one per student and one to display)</td>
</tr>
<tr>
<td></td>
<td>• Venom (book; one for the teacher)</td>
</tr>
<tr>
<td></td>
<td>• “Award-Winning Survival Skills” (from Unit 1, Lesson 2; one per student and one to display)</td>
</tr>
<tr>
<td></td>
<td>• Close Readers Do These Things anchor chart (begun in Module 1, Unit 1, Lesson 3)</td>
</tr>
<tr>
<td></td>
<td>• Vocabulary Strategies anchor chart (begun in Unit 1, Lesson 2)</td>
</tr>
<tr>
<td></td>
<td>• Expert Group Animal glossary (pages 13-14 of Expert Group Animal research journal)</td>
</tr>
<tr>
<td></td>
<td>• Animal Defense Mechanisms Word Wall (from Unit 1, Lesson 3)</td>
</tr>
<tr>
<td></td>
<td>• Blank Word Wall cards (three index cards for each expert group)</td>
</tr>
</tbody>
</table>
## Opening

### A. Engaging the Reader: Sketching (8 minutes)

- Invite students to get out their **Expert Group Animal research journal** and turn back to their sketch on their Sketch page on page 12.
- Ask them to start a second draft sketch. Ask them to add details to the sketch about their expert group animal’s defense mechanisms based on their research in Lesson 4.
- Circulate and support as needed. If necessary, prompt students by asking:
  * “What is a defense mechanism your animal uses to survive?”
  * “How can you show a defense mechanism of your animal in a sketch?”
- Invite students to share their sketch with a partner who is not in their expert animal group.
- Use equity sticks to cold call students, asking them to share one detail their partner included in his or her sketch.

### B. Review Learning Targets (2 minutes)

- Direct students’ attention to the learning targets and read them aloud:
  * “I can make inferences based on information from pictures and text.”
  * “I can support my inferences with details and examples from pictures and texts.”
  * “I can find the meanings of unfamiliar words to help me better understand a text.”
- Remind students of the purpose of their research about their expert group animals: They will eventually write an informative piece and narrative about the animal’s defense mechanisms.
- Tell students that today they will continue reading texts that give them information about their animal’s defense mechanisms. Remind them that proficient readers always read a text several times when gathering new information on a topic. Today, they will reread the text several times to collect information to add to their research notes and to examine the meanings of words.

### Meeting Students’ Needs

- Varying the methods of response for students makes the task accessible for all. By sketching, some students may be able to convey understanding of the content that they may not be able to convey in other ways.
- Discussing and clarifying the language of learning targets helps build academic vocabulary.
### Work Time

**A. Researching the Expert Group Animal (30 minutes)**
- Invite students to open to their Research note-catchers in their Expert Group Animal research journals and to retrieve their copies of *Animal Behavior: Animal Defenses, Venom,* and/or “Award-Winning Survival Skills.” Remind students that they have been using this note-catcher to help them research and take notes about their expert group animal’s defense mechanisms.
- Use equity sticks to call on a student to read the focus question at the top of the Research note-catcher:
  * “How does your expert group animal use its body and behaviors to help it survive?”
- Remind students that they should keep this question in mind while they research and that they will have a chance to answer it during this lesson.
- Direct students’ attention to the first page of the Research note-catcher (page 9 in their Expert Group Animal research journals), where they identified sections of *Animal Behavior: Animal Defenses, Venom,* and/or “Award-Winning Survival Skills” that would be helpful when researching their expert group animals.
- Ask them to continuing working with their expert groups to reread the texts, looking for details about their animal’s defense mechanisms. Remind them that they should record their findings on the second and third of the Research note-catcher (pages 10 and 11 in their Expert Group Animal research journals).
- Circulate and support as needed.

### Meeting Students’ Needs
- The teacher may offer selected shorter passages to specific groups based on the readiness and needs of the group. This provides an opportunity for students to read a complex text within the fourth-grade level span, but differentiates the length of the text, not the complexity.
- Graphic organizers and recording forms engage students more actively and provide the scaffolding that is especially critical for learners with lower levels of language proficiency and/or learning. You may want to provide a partially filled-in graphic organizer for students needing more supports.
- Some students may benefit from having key sections pre-highlighted in their texts. This will help them focus on small sections rather than scanning the whole text for answers.
## Work Time (continued)

### B. Rereading an Informational Text: A Closer Look at Words (15 minutes)
- Explain that students will now reread the texts they just used for research to practice figuring out the meaning of challenging words.
- Direct their attention to the **Close Readers Do These Things anchor chart**, where it says close readers read and reread texts many times to deeply understand them.
- Review the **Vocabulary Strategies anchor chart** by using equity sticks to call on students to read the strategies listed.
  - Read on in the text and infer.
  - Look in the glossary.
  - Look for a text feature that defines the word.
  - Look in a dictionary.
  - Think about parts of the word that you know.
- Tell students that they now are going to practice some of these strategies while rereading their expert group texts to determine the meaning of some challenging words.
- Invite students to use their homework from Lesson 4: words identified in their expert group texts that they did not know the meaning of. Explain that they will choose at least three words circled in their texts to define and record in their **Expert Group Animal glossary** in their Expert Group Animal research journals.
- Invite students to open to the glossary starting on page 13 of their Expert Group Animal research journal. Ask: *“How do we record words in this glossary?”*
- Cold call students to share out. Listen for responses like: “We write the word we are defining in the glossary, then write the definition, then write the vocabulary strategy we used to determine the meaning of that word, and then draw a quick sketch or diagram showing what that word means.”
- Explain that with their expert groups, students will reread their texts to determine and record the definitions of at least three words from their research texts.
- Tell students that after they do that, they will talk with their partners about their understanding of the words. Post the following directions:

### Meeting Students’ Needs
- Asking students to identify challenging vocabulary helps them monitor their understanding of a complex text. When students annotate the text by circling these words, it can also provide a formative assessment for the teacher.
Work Time (continued) | Meeting Students’ Needs
---|---
- Find the meaning of at least three of the following words:
  - armadillo expert group: armor, flex, burrows, investigate
  - gazelle expert group: herd, stotting, migrate
  - mimic octopus: mimic, imitate, resemble, dispose
  - monarch: warning colors, mimics, common, imitates
  1. With your partners, determine the meaning of at least three words in your expert group text.
  2. Write each word and its definition, the strategy you used to figure out the meaning, and a sketch representing the word.
  3. Reread the text with your group.
- Discuss these questions: How has your understanding of these words changed? Which words are still confusing for you and why?
- Give students 10 minutes to find at least three words from their texts, record their definitions and the strategy used, draw a sketch, and discuss their understanding. Circulate and support as needed. If necessary, ask questions like:
  - “How did you figure out the meaning of that word?”
  - “Are there any clues in the article that can help you figure out what that word means?”
- Listen for students to discuss the meanings of the words and to use strategies from the Vocabulary Strategies anchor chart when determining the meanings.
- Cold call groups to share words they added to their glossaries and visuals/notes for each word. Clarify the definition of each word if necessary.
- Focus students on the Animal Defense Mechanisms Word Wall. Remind students that the Word Wall has five sections—one for general animal defense mechanisms that they used in Unit 1, and four for the expert group animals. Tell students that they will now add more to their expert group animal sections of the Word Wall.
- Distribute three Blank Word Wall cards to each expert group.
- Invite groups to write the three words they discussed on their Word Wall cards.
- Ask groups to send one representative to post the group’s cards to their particular section of the Word Wall.
**Closing and Assessment**

**A. Sharing (5 minutes)**
- Partner students with classmate from a different expert group. Ask students to share with the following prompt:
  
  * Describe your animal and its defense mechanisms to a partner. Be sure to include information about your animal’s habitat, predators, and defenses. Try to use as many vocabulary words from your animal’s section of the word wall as you can.

  - Circulate and observe whether students are able to describe their animal and its defenses. Students who are unable to articulate what they have learned verbally are likely to struggle when writing about their animal and will likely need more support during the writing process in the last half of this unit.

**Meeting Students’ Needs**
- To support students in sharing, consider using a sentence frame similar to the following: My animal is the ___________ it lives in____________. It defends itself from____________ by _____________.

---

**Homework**

- Continue reading your independent reading book for this unit.

---

There are no new supporting materials for this lesson.
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can explain what a text says using specific details from the text. (RI.4.1)
- I can make inferences using specific details from text. (RI.4.1)
- I can summarize informational or persuasive text. (RI.4.2)
- I can conduct a research project to become knowledgeable about a topic. (W.4.7)
- I can document what I learn about a topic by taking notes. (W.4.8)
- I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4 a and b)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>- I can make inferences based on information from a text.</td>
<td>- Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish</td>
</tr>
<tr>
<td>- I can support my inferences with details and examples from a text.</td>
<td></td>
</tr>
<tr>
<td>- I can summarize a text using the main idea and supporting details found in the text.</td>
<td>- Tracking My Progress, Mid-Unit 2 recording form</td>
</tr>
</tbody>
</table>
## Agenda

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Opening</td>
</tr>
<tr>
<td></td>
<td>A. Engaging the Reader: Adding a Caption to Sketches (5 minutes)</td>
</tr>
<tr>
<td>2.</td>
<td>Work Time</td>
</tr>
<tr>
<td></td>
<td>A. Mid-Unit 2 Assessment: Reading and Synthesizing Information From Two Texts on the Pufferfish (50 minutes)</td>
</tr>
<tr>
<td>3.</td>
<td>Closing and Assessment</td>
</tr>
<tr>
<td></td>
<td>A. Reflecting on Learning Targets—Tracking My Progress (5 minutes)</td>
</tr>
<tr>
<td>4.</td>
<td>Homework</td>
</tr>
<tr>
<td></td>
<td>A. Continue reading your independent reading book for this unit.</td>
</tr>
</tbody>
</table>

## Teaching Notes

- In this lesson, students complete the Mid-Unit 2 Assessment. The texts and note-catchers used in the assessment will be used again by students in the End of Unit 2 Assessment. This mid-unit assessment builds toward the end of unit assessment by having students read two texts about the pufferfish and collect research notes about its defense mechanisms. In the end of unit assessment, they will use these texts and notes to write an informative page about the pufferfish. Be sure to hold on to students’ copies of the text and research note-catchers so that they can be redistributed for use on the end of unit assessment in Lesson 12.

- The Mid-Unit 2 Assessment contains excerpts from two texts, “Award-Winning Survival Skills” and “All Puffed Up.” Students should be familiar with the excerpt from “Award-Winning Survival Skills,” as that text has been read extensively in Unit 1. Even though this excerpt is not entirely new, it is used in this assessment because students will be working with the pufferfish section in a new way.

- If students receive accommodations for assessment, communicate with the cooperating service providers regarding the practices of instruction in use during this study as well as the goals of the assessment.

- For some students, this assessment may require more than the 50 minutes allotted. Consider providing students time over multiple days if necessary.

- After the Mid-Unit 2 Assessment, students reflect on the learning targets with Tracking My Progress, Mid-Unit 2 recording form. This exercise is meant to provide them with time to formally keep track of and reflect on their own learning.

- Post: Learning targets.
Lesson Vocabulary | Materials
--- | ---
track, reflect | • Expert Group Animal research journals (from Lesson 2; one per student and one to display)
• Sketch page (page 12 of Expert Group Animal research journal)
• Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish (one per student)
• Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish (answers, for teacher reference)
• Tracking My Progress, Mid-Unit 2 recording form (one per student and one to display)

Opening

A. Engaging the Reader: Adding a Caption to Sketches (5 minutes)

• Invite students to get out their Expert Group Animal research journal and turn back to their sketch on their Sketch page on page 12. Ask them to finish their a second draft sketch by writing a caption. Encourage students to use at least one of their vocabulary words in their caption.

• Circulate and support as needed. If necessary, prompt students by asking:
  * “How did you show a defense mechanism of your animal in a sketch? How will you capture this in your caption?”
  * “What vocabulary words from your research are you using in your caption?”

• Invite students to share their sketch with a partner who is not in their expert animal group.

• Use equity sticks to cold call students, asking them to share one detail their partner included in his or her sketch.
## Work Time

<table>
<thead>
<tr>
<th>A. Mid-Unit 2 Assessment: Reading and Researching Defense Mechanisms of the Pufferfish (50 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Distribute the Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish. Give students 50 minutes to complete it.</td>
<td>• If students receive accommodations for assessment, communicate with the cooperating service providers regarding the practices of instruction in use during this study as well as the goals of the assessment.</td>
</tr>
<tr>
<td>• While students are taking the assessment, circulate to monitor their test-taking skills. This is an opportunity to analyze their behaviors while taking an assessment. Document strategies students use. For example, look for those who are annotating their texts, using their graphic organizers to take notes before answering questions, and returning to the text as they answer questions.</td>
<td>• For some students, this assessment may require more than the 50 minutes allotted. Consider providing time over multiple days if necessary.</td>
</tr>
</tbody>
</table>
### Closing and Assessment

**A. Reflecting on Learning Targets—Tracking My Progress (5 minutes)**

- Congratulate students on their hard work on the mid-unit assessment.
- Distribute the *Tracking My Progress, Mid-Unit 2 recording form*. Remind students that successful learners keep track and reflect on their own learning. Point out that they have been doing this informally all year, during debriefs, when they consider how well they are doing making progress toward the learning targets.
- Review Step 1 in the self-assessment and remind students that this is where you would like them to explain what the target means to them. For example, the first target uses the phrase “based on information from a text.” They should write what the target means in their own words by explaining what it means to infer.
- Point out the second step and explain that this is similar to the thumbs-up, -sideways, or -down that they have used in previous lessons. They should also explain why they think they “need more help,” “understand some,” or are “on the way,” and give examples. Consider giving students an example such as: “I circled that I need more help, because I can’t remember what the word *summary* means.”
- Ask students to complete the Tracking My Progress, Mid-Unit 2 form.
- Collect these self-assessments to use as a formative assessment to guide instructional decisions during the remainder of this unit and Unit 3.

### Meeting Students’ Needs

- Developing self-assessment and reflection supports all learners, but research shows it supports struggling learners most.

### Homework

- Continue reading your independent reading book for this unit.
Mid-Unit 2 Assessment:
Reading and Researching the Defense Mechanisms of the Pufferfish

Name: ____________________________

Date: ____________________________

Long-Term Learning Targets Assessed:
I can explain what a text says using specific details from the text. (RI.4.1)
I can make inferences using specific details from text. (RI.4.1)
I can summarize informational or persuasive text. (RI.4.2)
I can conduct a research project to become knowledgeable about a topic. (W.4.7)
I can document what I learn about a topic by taking notes. (W.4.8)
I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4 a and b)

Part 1: Read both texts for the gist. Then, reread the texts and use them to answer the questions that follow.

From “Award-Winning Survival Skills”:

“Best Action Hero: The Spiny Pufferfish”

Ordinarily, the meek spiny pufferfish (Diodon holocanthus) drifts slowly in its native coral-reef habitats around the world. Its round body and small fins make it a sluggish swimmer—and perfect prey. But just try to eat it, and get ready to be BLOWN AWAY! When threatened, the puffer inflates to three times its normal size. “It just swallows water until its stomach is completely full,” says biologist and pufferfish expert Ralph Turingan at the Florida Institute of Technology. How does the fish change shape? Its skin and stomach are super-stretchable. Also, it lacks a rib cage—no bones to impede an expanding stomach. Dare to swallow an uninflated puffer? “Sharks have actually died from a pufferfish inflating in their esophagus,” says Turingan. Other predators who’ve witnessed Superman in action stay clear of the Big Puffer!
“All Puffed Up”:

In the warm tropical ocean, there are fish of many shapes and sizes. Some are harmless vegetarians like the parrotfish. Others are dangerous predators like the tiger shark. And some fish that seem harmless are really quite dangerous.

One such fish swims slowly along. He looks like easy prey. He is the porcupine pufferfish, and his cute cartoon face hides a deadly secret. If a tiger shark or barracuda approaches, he will not try to swim away. Instead, he will quickly swallow water until he is completely full and round. This makes his spines stick out in all directions. He is now impossible to swallow. A predator could manage to sneak up and swallow him, but it would be in for another surprise because he is also toxic.

These defenses won’t stop one predator, though. Mankind. In Japan, the porcupine pufferfish is considered a delicacy. The puffer is a rare and expensive food, but it is also deadly to eat if you don’t know how to prepare it. Chefs in Japan have to be specially trained to remove the poisonous parts of this fish before they serve it.

Today there are no fishing nets close by and no predators in sight. This little puffer is safe. He continues to swim along, looking for a tasty crab or sea urchin to eat. He may look cute and harmless and like perfect prey, but his deadly defenses keep him quite safe.

Written by Expeditionary Learning for Instructional Purposes. Lexile 810
Sources:
http://www.fлимnh.ufl.edu/fish/Gallery/Descriptor/Porcupine/Porcupine.htm
http://animals.nationalgeographic.com/animals/fish/pufferfish/
http://www.bristolzoo.org.uk/porcupine-pufferfish
http://www.britannica.com/EBchecked/topic/482954/puffer
Mid-Unit 2 Assessment:
Reading and Synthesizing Information From Two Texts on the Pufferfish

1. Find and reread the following sentence from Paragraph 1 of “Best Action Hero: The Spiny Pufferfish”:

“When threatened, the puffer inflates to three times its normal size.”

Which explanation is most appropriate for how the pufferfish inflates?

a. The pufferfish fills up its stomach with air.
b. The pufferfish fills up its stomach with water.
c. The pufferfish fills up its spines with air.
d. The pufferfish fills up its spines with water.

2. Which line from the text “All Puffed Up” best supports your answer for Question 1?

a. “If a tiger shark or barracuda approaches, he will not try to swim away.”
b. “Instead, he will quickly swallow water until he is completely full and round.”
c. “This makes his spines stick out in all directions.”
d. “He continues to swim along, looking for a tasty crab or sea urchin to eat.”

3. In “Best Action Hero: The Spiny Pufferfish,” the text says, “Its skin and stomach are super-stretchable.” Using your knowledge of affixes, write the definition of the word super-stretchable as used in the context of this sentence:
4. Which line from the text best supports your answer for Question 3?

a. “Its round body and small fins make it a sluggish swimmer—and perfect prey.”
b. “When threatened, the puffer inflates to three times its normal size.”
c. “Sharks have actually died from a pufferfish inflating in their esophagus.”
d. “Other predators who’ve witnessed Superman in action stay clear of the Big Puffer!”

5. Read the following sentence from “Best Action Hero: The Spiny Pufferfish”:

“Other predators who’ve witnessed Superman in action stay clear of the Big Puffer!”

Which explanation is most appropriate for why other predators stay clear of the pufferfish?

a. The predators know it is dangerous from watching it in action.
b. The predators were poisoned by the pufferfish before.
c. The predators think the pufferfish is harmless.
d. The predators think the pufferfish is easy prey.
Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish

Part 2: Summarizing the text: After thinking more closely about “Best Action Hero: The Spiny Pufferfish,” summarize what you think this reading is mostly about. Use several specific details from the text in your summary.

After thinking more closely about “All Puffed Up,” summarize what you think this reading is mostly about. Use several specific details from the text in your summary.
Mid-Unit 2 Assessment:
Reading and Researching the Defense Mechanisms of the Pufferfish

Part 3: Reread the texts and complete the research note-catcher.

Focus question: How does the pufferfish use its body and behaviors to help it survive?

Expert Group Animal: Pufferfish

Source: “Award-Winning Survival Skills”

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Reading and Researching the Defense Mechanisms of the Pufferfish

Focus question: How does the pufferfish use its body and behaviors to help it survive?

**Expert Group Animal:** Pufferfish

**Source:** “All Puffed Up”

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Mid-Unit 2 Assessment:
Reading and Researching the Defense Mechanisms of the Pufferfish
(Answers, for Teacher Reference)

Long-Term Learning Targets Assessed:
I can explain what a text says using specific details from the text. (RI.4.1)
I can make inferences using specific details from text. (RI.4.1)
I can summarize informational or persuasive text. (RI.4.2)
I can conduct a research project to become knowledgeable about a topic. (W.4.7)
I can document what I learn about a topic by taking notes. (W.4.8)
I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4 a and b)

Part 1: Read both texts for the gist. Then, reread the texts and use them to answer the questions that follow.

From “Award-Winning Survival Skills”:

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Ordinarily, the meek spiny pufferfish (*Diodon holocanthus*) drifts slowly in its native coral-reef habitats around the world. Its round body and small fins make it a sluggish swimmer—and perfect prey. But just try to eat it, and get ready to be BLOWN AWAY! When threatened, the puffer inflates to three times its normal size. “It just swallows water until its stomach is completely full,” says biologist and pufferfish expert Ralph Turingan at the Florida Institute of Technology. How does the fish change shape? Its skin and stomach are super-stretchable. Also, it lacks a rib cage—no bones to impede an expanding stomach. Dare to swallow an uninflated puffer? “Sharks have actually died from a pufferfish inflating in their esophagus,” says Turingan. Other predators who’ve witnessed Superman in action stay clear of the Big Puffer!
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One such fish swims slowly along. He looks like easy prey. He is the porcupine pufferfish, and his cute cartoon face hides a deadly secret. If a tiger shark or barracuda approaches, he will not try to swim away. Instead, he will quickly swallow water until he is completely full and round. This makes his spines stick out in all directions. He is now impossible to swallow. A predator could manage to sneak up and swallow him, but it would be in for another surprise because he is also toxic.

These defenses won’t stop one predator, though. Mankind. In Japan, the porcupine pufferfish is considered a delicacy. The puffer is a rare and expensive food, but it is also deadly to eat if you don’t know how to prepare it. Chefs in Japan have to be specially trained to remove the poisonous parts of this fish before they serve it.

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Sources:
http://www.flmnh.ufl.edu/fish/Gallery/Descript/Porcupine/Porcupine.htm
http://animals.nationalgeographic.com/animals/fish/pufferfish/
http://www.bristolzoo.org.uk/porcupine-pufferfish
http://www.britannica.com/EBchecked/topic/482954/puffer
1. Find and reread the following sentence from Paragraph 1 of “Best Action Hero: The Spiny Pufferfish”:

“When threatened, the puffer inflates to three times its normal size.”

Which explanation is most appropriate for how the pufferfish inflates?

a. The pufferfish fills up its stomach with air.

b. **The pufferfish fills up its stomach with water.**

c. The pufferfish fills up its spines with air.

d. The pufferfish fills up its spines with water.

2. Which line from the text “All Puffed Up” best supports your answer for Question 1?

a. “If a tiger shark or barracuda approaches, he will not try to swim away.”

b. **“Instead, he will quickly swallow water until he is completely full and round.”**

c. “This makes his spines stick out in all directions.”

d. “He continues to swim along, looking for a tasty crab or sea urchin to eat.”

3. In “Best Action Hero: The Spiny Pufferfish,” the text says, “Its skin and stomach are super-stretchable.” Using your knowledge of affixes, write the definition of the word *super-stretchable* as used in the context of this sentence:

**can be expanded beyond the norm**
4. Which line from the text best supports your answer for Question 3?

a. “Its round body and small fins make it a sluggish swimmer—and perfect prey.”
b. “When threatened, the puffer inflates to three times its normal size.”
c. “Sharks have actually died from a pufferfish inflating in their esophagus.”
d. “Other predators who’ve witnessed Superman in action stay clear of the Big Puffer!”

5. Read the following sentence from “Best Action Hero: The Spiny Pufferfish”:

“Other predators who’ve witnessed Superman in action stay clear of the Big Puffer!”

Which explanation is most appropriate for why other predators stay clear of the pufferfish?

a. The predators know it is dangerous from watching it in action.
b. The predators were poisoned by the pufferfish before.
c. The predators think the pufferfish is harmless.
d. The predators think the pufferfish is easy prey.
Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish (Answers, for Teacher Reference)

**Part 2: Summarizing the text:** After thinking more closely about “Best Action Hero: The Spiny Pufferfish,” summarize what you think this reading is mostly about. Use several specific details from the text in your summary.

The pufferfish protects itself by inflating to three times its normal size. Its body doesn’t have bones and is super-stretchable.

After thinking more closely about “All Puffed Up,” summarize what you think this reading is mostly about. Use several specific details from the text in your summary.

The pufferfish looks harmless but is very dangerous. It protects itself by swallowing water and inflating, and its spikes make it hard to swallow. It is also toxic.
**Part 3: Reread the texts and complete the research graphic organizers.**

Focus question: How does the pufferfish use its body and behaviors to help it survive?

**Expert Group Animal: Pufferfish**

Source: “Award-Winning Survival Skills”

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<tr>
<th>Details about the Defense Mechanism</th>
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<tbody>
<tr>
<td>• How does the animal use its body to survive?</td>
<td>• It is too big to swallow.</td>
</tr>
<tr>
<td>• How does the animal use its behavior to survive?</td>
<td>• This is how it is able to inflate to three times its normal size.</td>
</tr>
<tr>
<td>• “The puffer inflates to three times its normal size.”</td>
<td></td>
</tr>
<tr>
<td>• “It swallows water until its stomach is completely full.”</td>
<td></td>
</tr>
<tr>
<td>• The pufferfish’s skin and stomach are stretchy.</td>
<td>• This allows the puffer to be able to inflate.</td>
</tr>
</tbody>
</table>
Focus question: How does the pufferfish use its body and behaviors to help it survive?

Expert Group Animal: Pufferfish

Source: “All Puffed Up”

### Details about the Defense Mechanism
- How does the animal use its body to survive?
- How does the animal use its behavior to survive?

### How This Helps the Animal Survive

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<thead>
<tr>
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<tbody>
<tr>
<td>A pufferfish won’t swim away if a tiger shark or barracuda comes close to it.</td>
<td>He’s not fast enough to escape these predators, so he inflates instead.</td>
</tr>
<tr>
<td>“He will quickly swallow water until he is completely full and round.”</td>
<td>This makes his spikes stick out in all directions, which makes it impossible for predators to swallow him.</td>
</tr>
<tr>
<td>“He is also toxic.”</td>
<td>He will kill his predator or make it sick.</td>
</tr>
</tbody>
</table>
Learning target: I can make inferences based on information from a text.

1. The target in my own words is:

2. How am I doing? Circle one.

   I need more help to learn this

   I understand some of this

   I am on my way!

3. The evidence to support my self-assessment is:
Tracking My Progress, Mid-Unit 2

**Learning target:** I can summarize a text using the main idea and supporting details found in the text.

1. The target in my own words is:

2. How am I doing? Circle one.

   - **I need more help to learn this**
   - **I understand some of this**
   - **I am on my way!**

3. The evidence to support my self-assessment is:
Grade 4: Module 2B: Unit 2: Lesson 7
Planning to Write an Informative Piece: Synthesizing Research on Expert Group Animals
# Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can accurately synthesize information from two texts on the same topic. (RI.4.9)
I can produce writing that is appropriate to task, purpose, and audience. (W.4.4)
I can group supporting facts together about a topic in an informative/explanatory text. (W.4.2a)
I can sort my notes into categories. (W.4.8)

<table>
<thead>
<tr>
<th>Supporting Learning Target</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can identify characteristics of informative writing.</td>
<td>• Informative Page Planning graphic organizer</td>
</tr>
<tr>
<td>• I can synthesize information from my research notes onto a planning graphic organizer.</td>
<td></td>
</tr>
<tr>
<td>• I can group together facts from my research with related evidence in my informative piece.</td>
<td></td>
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</table>
### Agenda

<table>
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<th>Opening</th>
<th>1. Opening</th>
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<tbody>
<tr>
<td>A. Engaging</td>
<td>A. Engaging</td>
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<td>the Writer:</td>
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<td>Creating an</td>
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<td>Informational</td>
<td>Informational</td>
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<tr>
<td>Texts Anchor</td>
<td>Texts Anchor</td>
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<tr>
<td>Chart (10</td>
<td>Chart (10</td>
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<td>minutes)</td>
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<tr>
<td>B. Review</td>
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<td>Learning</td>
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<td>Targets (5</td>
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<td>minutes)</td>
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<thead>
<tr>
<th>Work Time</th>
<th>2. Work Time</th>
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<tbody>
<tr>
<td>A. Planning</td>
<td>A. Planning</td>
</tr>
<tr>
<td>an Informative Text: Synthesizing Research Notes (20 minutes)</td>
<td>Research Notes (20 minutes)</td>
</tr>
<tr>
<td>B. Planning</td>
<td>B. Planning</td>
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<tr>
<td>an Informative Text: Using a Planning Graphic Organizer (20 minutes)</td>
<td>Graphic Organizer (20 minutes)</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Closing and Assessment</th>
<th>3. Closing and Assessment</th>
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</thead>
<tbody>
<tr>
<td>A. Research Reflection</td>
<td>A. Research Reflection</td>
</tr>
<tr>
<td>(5 minutes)</td>
<td>(5 minutes)</td>
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<thead>
<tr>
<th>Homework</th>
<th>4. Homework</th>
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</table>

### Teaching Notes

- This is the first in a sequence of lessons during which students plan and write the informative page for Part I of the performance task. In this lesson, they discuss elements of informational texts to frame their writing for their informative page.
- Students review and color-code their research notes taken in Lessons 2–5; colors are specified within the lesson for clarity. The specific colors do not matter, as long as they are using three different colors—one for their expert animal’s physical description, one for its defense mechanisms, and one for its predators.
- Students then work to synthesize their color-coded notes using the Informative Page Planning graphic organizer. In this lesson, they focus on the Introduction and Detail Paragraphs boxes of the graphic organizer. The focus statement, concluding statement, and vocabulary boxes of this graphic organizer are completed in later lessons, so they should be left blank for now. At the end of this lesson, students should have the Introduction Paragraph and Detail Paragraphs 1 and 2 boxes completed. If they are not completed, students should finish them for homework.
- This first piece of the performance task will be assessed using the checklist on the Informative Page Directions—distributed and reviewed in Work Time B—instead of a formal rubric. You may wish to use the New York State expository rubric instead.
- Students should organize their materials for the informative page in a writing folder. Be sure they have this folder and introduce it before this lesson.
- Depending on the expert group, students may have the defense mechanisms for the detail paragraphs determined for them. It should be noted that for the mimic octopus, the detail paragraphs will be about the same defense mechanism—mimicry—with each paragraph focusing on a different animal that the octopus mimics.
- In advance:
  - Review: Fist to Five in Checking for Understanding Techniques (see Appendix).
  - Gather highlighters.
- Post: Performance Task and Guiding Questions anchor charts; learning targets.
# Planning to Write an Informative Piece: Synthesizing Research on Expert Group Animals

## Lesson Vocabulary

- **physical description**

## Materials

- Informational Texts anchor chart (new; co-created with students during Opening A)
- “Award-Winning Survival Skills” (from Unit 1, Lesson 2; one per student and one to display)
- *Animal Behavior: Animal Defenses* (book; from Unit 1; one per student and one to display)
- Performance Task anchor chart (begun in Unit 1, Lesson 1)
- Equity sticks
- Guiding Questions anchor chart (begun in Unit 1, Lesson 1)
- Three different-colored highlighters (three highlighters per student and for the teacher)
- Expert Group Animal research journals (from Lesson 2; one per student and one to display)
- Web Page Research Guide (pages 2-8 of Expert Group Animal research journal; used in Lesson 2)
- Research note-catcher (pages 9-11 of Expert Group Animal research journal; used in Lesson 4)
- Animal Defenses research journal (from Unit 1; one to display)
- Informative Page Directions (one per student and one to display)
- Document camera
- Informative Page Planning graphic organizer (one per student and one to display)
- Informative Page Planning graphic organizer (completed for each expert group; for teacher reference)
### Opening

#### A. Engaging the Writer: Creating an Informational Texts Anchor Chart (10 minutes)

- Work with students to reflect on the elements of informational texts to create an **Informational Texts anchor chart** by inviting them to take out any of the texts read in this module so far, including *Award-Winning Survival Skills*, *Animal Behavior: Animal Defenses*, and any other texts used in their research.

- Invite students to turn and talk with a partner. Ask:
  - “What is the purpose of informational texts?”
  - “What do these texts have in common?”

- Ask for volunteers to share out. Collect students’ ideas on the Informational Texts anchor chart. Be sure the following characteristics are included:
  - Informational texts inform or teach a reader about a topic.
  - Informational texts have a topic sentence with evidence like facts and details that support the topic and a concluding statement or section that sums up what the text was about.
  - Informational texts have precise vocabulary.
  - Informational texts are based on research the author does before writing.
  - Informational texts often have pictures or other visuals that support the text.

- Tell students that when they write their informational page for Part I of the performance task, they should be sure their writing has these characteristics.

### Meeting Students’ Needs

- Anchor charts provide a visual cue to students about what to do when you ask them to work independently. They also serve as note-catchers when the class is co-constructing ideas.
### Opening (continued)

**B. Review Learning Targets (5 minutes)**

- Direct students’ attention to the **Performance Task anchor chart** and remind them what they are working toward during this module: an informative page about their expert group animal in this unit, and a narrative featuring their expert group animal in Unit 3. Point to the second bullet point of the prompt (“an informational page ...”). Remind students that they are working on this part of the performance task in this unit.

- Tell them they are now ready to begin planning and writing the informational page.

- Review what information needs to be on the informational page by using **equity sticks** to call on a student to read the second bullet point of the performance task prompt aloud:
  
  * “An informational page with a physical description of your animal, its habitat, its defense mechanisms, and predators”

- Tell students that before they can begin writing, they will need to synthesize their notes and plan their writing.

- Direct students’ attention to the learning targets and invite them to silently read the targets to themselves:

  - “I can identify characteristics of informative writing.”
  - “I can synthesize information from my research notes onto a planning graphic organizer.”
  - “I can group together facts from my research with related evidence in my informative piece.”

- Tell students they just worked toward the first target when they created the Informational Texts anchor chart. Answer any clarifying questions about the remaining targets.

### Meeting Students’ Needs

- Discussing and clarifying the language of learning targets helps build academic vocabulary.
### Work Time

**A. Planning an Informative Text: Synthesizing Research Notes (20 minutes)**

- Frame this part of the performance task by asking:
  - “What is the question we are trying to answer in our research?”
- Listen for: “How does my expert group animal use its body and behaviors to help it survive?” Remind students that this is one of the guiding questions for the module.
- Draw their attention to the **Guiding Questions anchor chart**. Use equity sticks to call on a student to read the second question aloud:
  - “How can a writer use knowledge from their research to inform and entertain?”
- Explain that in this unit, they have been working on understanding how writers use research to inform their readers.
- Refer back to the Informational Texts anchor chart from Opening A and ask:
  - “What topic will we be informing or teaching our reader about?”
- Listen for responses such as: “We’ll be teaching our reader about our expert group animal’s defense mechanism” or “We’ll be teaching the reader about how our expert group animal uses its body and behaviors to help it survive.”
- Point to the fourth bullet point on the Informational Texts anchor chart:
  - “Informational texts are based on research the author does before writing.”
- Tell students that now that they have researched their expert group animals, they are ready to begin writing their informational page.
- Review the steps of the writing process by asking:
  - “What steps do writers go through when writing a text?”
- Listen for students to say that writers plan, draft, revise, edit, and publish their writing.
- Tell students that researching is part of the planning process; writers need to learn about what they are writing about. Explain that in this lesson, they will use their research to plan their informative pieces.
- Refer back to the second bullet point of the performance task prompt and ask:
  - “What kind of information do we need to include in our informational pieces?”

### Meeting Students’ Needs

- As an alternative to highlighting notes, you may wish to have students use sticky notes instead. Students could look through their research journals for notes needed for each part of the informational piece, rewriting each note on a sticky note. They could then manipulate the sticky notes to group information or stick the notes directly on their Planning graphic organizers in Work Time B.
### Work Time (continued)

- Listen for students to say that they will need to include a physical description of their animal and information about its defense mechanisms and its predators.

- Using **three different-colored highlighters**, highlight “physical description of your animal” in pink, “its defense mechanisms” in orange, and “predators” in yellow on the performance task prompt.

- Invite students to take out their **Expert Group Animal research journals** and refer to their **Web Page Research Guide** and **Research note-catcher** from pages 2-8 and 9-11. Remind them that they will use these notes to write their informational pieces.

- Ask:
  - “What information are we looking for in order to write about your animal’s physical description?”

- Listen for responses like: “We’re looking for information about what the animal looks like.”

- Invite students to skim their notes for information about what their expert group animal looks like.

- Guide them to the realization that their notes are organized by source rather than by content.

- Ask:
  - “How can we organize our notes to help us plan our writing?”

- Listen for students to suggest ideas for coding their notes.

- Tell them that they will use highlighters to color-code their notes, highlighting their notes in a different color for each part of the informational piece: physical description, defense mechanisms, and predators.

- Point to the second bullet point of the performance task prompt and tell students that they will highlight notes about the physical description of their animal in pink, notes about their animal’s defense mechanisms in orange, and notes about their animal’s predators in yellow.

- Distribute three different-colored highlighters to each student.

- Invite them to independently use their highlighters to color-code their notes.

- If necessary, model color-coding notes for the millipede’s physical description in the Animal Defenses research journal (from Unit 1). As you model, be sure to:
### Work Time (continued)

- Skim the Animal Defenses research journal for notes on what the millipede looks like and highlight these notes in pink.
- Notice notes about other information, such as the millipede’s predators, and think aloud about why that should not be highlighted in pink.

### Meeting Students’ Needs

- Circulate to support students as needed, checking that they are using their highlighters only to highlight information about their animal’s physical description, defenses, or predators. Prompt students by asking questions like:
  * “What does your animal look like? Where in your notes did you record that information?”
- After about 10 minutes, invite students to check in with their expert groups. Say something like:
  * “With your expert group, discuss what you have highlighted about your animal’s physical description.”
  * “What information are you looking through your notes for now?”
- Invite students to continue color-coding their notes; they may do so independently or with partners from their expert group.

### B. Planning an Informative Text: Using a Planning Graphic Organizer (20 minutes)

- Refocus students whole group.
- Ask them to turn their attention to their Expert Group Animal research journals. Invite them to look over their notes and decide how prepared they feel to begin planning their informational page.
- Ask students to demonstrate their readiness using the Fist to Five Checking for Understanding technique.
  - Fist – “I am completely confused about what I’m supposed to do and am not prepared at all!”
  - 1 finger – “I kind of know what I’m doing but still need more support and/or time.”
  - 2 fingers – “I’m getting there. I know what I need to do; I just need a little more support and/or time.”
  - 3 fingers – “I’m almost there.”
  - 4 fingers – “I’m feeling really good about starting to plan.”
  - 5 fingers – “I’m ready to do the planning page right now! Let’s go!”
- Ask:
  * “Now that we have coded our notes, are we ready to begin drafting our pieces?”
- Listen for students to notice that they have not created a written plan and need to do so before writing.

- Graphic organizers and recording forms engage students more actively and provide scaffolding that is especially critical for learners with lower levels of language proficiency and/or learning.
### Work Time (continued)

- Explain that students will now have a chance to organize their coded research notes onto a planning page so the information for their writing is all in one spot. Ask:
  - “Why is it important to plan our writing using a planning page?”
- Listen for responses like: “It will help us notice any gaps in our research,” “It will help us think about the organization and flow of our writing,” or “It will help us make sure we are answering our research question completely.”
- Distribute the **Informative Page Directions** and use a document camera to display a copy. Invite students to independently read through the directions. Then answer any clarifying questions.
- Display and distribute the **Informative Page Planning graphic organizer**. Tell students they will use this graphic organizer to plan their piece; explain that using it will help them include all of the criteria outlined in the directions.
- Use equity sticks to call on students to read the headings and prompts in each box of the Informative Page Planning graphic organizer. Answer any clarifying questions as the prompts are read.
- Point out the structure of the informative page: It will have an introduction paragraph and two detail paragraphs, with a concluding statement at the end of the second detail paragraph.
- Explain that before they try to use the graphic organizer on their own, students will work through an example together for the millipede.
- Model using the planning graphic organizer. Refer to the **Informative Page Planning graphic organizer (for teacher reference)** as needed. As you model, be sure to:
  - Note for students that they should leave the focus and concluding statements blank for now.
  - Use your highlighted notes to record information in the introduction paragraph box of the graphic organizer, reminding students to look for notes highlighted in pink for information about the animal’s physical description and notes in yellow for information about its predators.
  - Look back at the research texts for missing or more specific information than what was recorded in the research notes.
  - Record the sources used.
- Invite students to independently look through their notes for information for their introduction paragraphs. Remind them to look for the information they highlighted in pink for the physical description and yellow for the predators and to record the sources they are using in the My Sources box.

### Meeting Students’ Needs

<table>
<thead>
<tr>
<th>Planning to Write an Informative Piece: Synthesizing Research on Expert Group Animals</th>
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<tbody>
<tr>
<td><strong>Work Time (continued)</strong></td>
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<tr>
<td><strong>Meeting Students’ Needs</strong></td>
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<tr>
<td><strong>Work Time (continued)</strong></td>
</tr>
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<td>Explain that students will now have a chance to organize their coded research notes onto a planning page so the information for their writing is all in one spot. Ask:</td>
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<td>- “Why is it important to plan our writing using a planning page?”</td>
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<td>Listen for responses like: “It will help us notice any gaps in our research,” “It will help us think about the organization and flow of our writing,” or “It will help us make sure we are answering our research question completely.”</td>
</tr>
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<tr>
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<td>Explain that before they try to use the graphic organizer on their own, students will work through an example together for the millipede.</td>
</tr>
<tr>
<td>Model using the planning graphic organizer. Refer to the <strong>Informative Page Planning graphic organizer (for teacher reference)</strong> as needed. As you model, be sure to:</td>
</tr>
<tr>
<td>- Note for students that they should leave the focus and concluding statements blank for now.</td>
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<tr>
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</tr>
<tr>
<td>- Look back at the research texts for missing or more specific information than what was recorded in the research notes.</td>
</tr>
<tr>
<td>- Record the sources used.</td>
</tr>
<tr>
<td>Invite students to independently look through their notes for information for their introduction paragraphs. Remind them to look for the information they highlighted in pink for the physical description and yellow for the predators and to record the sources they are using in the My Sources box.</td>
</tr>
</tbody>
</table>
### Work Time (continued)

- Circulate and support as needed, being sure to check in with students who showed a fist or one or two fingers during the Fist to Five at the start of Work Time B.
- After about 5 minutes, bring students back together whole group. Tell them they will have a chance to discuss what they have planned with their expert groups at the end of the lesson.
- Tell students they will now plan information for their detail paragraphs. Model deciding on the two defense mechanisms to write about and adding details to the graphic organizer. As you model, be sure to:
  - Use your highlighted notes to record information in each remaining part of the graphic organizer, reminding students to look for notes highlighted in orange about the animal’s defense mechanisms.
  - Look back at the research texts for missing or more specific information than what was recorded in the research notes.
- Invite students to independently look through their notes for information for their detail paragraphs. Remind them to look for information they highlighted in orange for the defense mechanisms of their expert group animal and to record any new sources they are using in the My Sources box.
- Circulate and support as needed, being sure to check in with students who showed a fist or one or two fingers during the Fist to Five at the start of Work Time B.
- After about 10 minutes, bring students back together whole group. Tell them they will now have a chance to debrief their work with their expert groups.

### Meeting Students’ Needs

- You may wish to pull a small group of students during this time, focusing your attention on those who need support with organization of materials.
## Closing and Assessment

<table>
<thead>
<tr>
<th>A. Research Reflection (5 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Invite students to gather in their expert groups with their Informative Page Planning graphic organizers.</td>
<td>• Developing self-assessment and reflection supports all learners.</td>
</tr>
<tr>
<td>• Have them Think-Pair-Share. Ask:</td>
<td></td>
</tr>
<tr>
<td>* “Look at the boxes for the introduction and detail paragraphs. What information do you need to research further?”</td>
<td></td>
</tr>
<tr>
<td>• Listen for them to notice any gaps in their research based on the notes they recorded on their graphic organizers.</td>
<td></td>
</tr>
<tr>
<td>• Explain that for homework, they should reread their research texts and notes, looking for any information that is missing from the introduction and detail paragraph boxes on the Informative Page Planning graphic organizers.</td>
<td></td>
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</tbody>
</table>

## Homework

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Complete the Introduction and Detail Paragraph boxes on the Informative Page Planning graphic organizer.</td>
</tr>
</tbody>
</table>
Teacher directions: Write the following on chart paper to create this anchor chart.

Informational Texts

* Informational texts inform or teach a reader about a topic.

* Informational texts have a topic sentence with evidence like facts and details that support the topic and a concluding statement or section that sums up what the text was about.

* Informational texts have precise vocabulary.

* Informational texts are based on research the author does before writing.

* Informational texts often have pictures or other visuals that support the text.
Informative Page Directions

Name:  
Date:  

Directions:
1. Read the prompt below.
2. Using your research notes from your Expert Group Animal research journal, plan an informative written piece for the prompt below. (*RI.4.9, W.4.2, W.4.4, W.4.7*)
3. Write your piece on a separate sheet of lined paper.

Prompt:
Review your research about your animal’s defense mechanisms. Then, use the evidence you have gathered to write an informative piece that describes two defense mechanisms of the animal you have researched. Be sure to do the following in your piece:

- Introduce the animal you have researched, including a focus statement that states the main idea of the piece. (*W.4.2a*)
- Use paragraphs to group related facts and evidence. (*W.4.2a*)
- Use facts and details to describe two of your animal’s defense mechanisms. (*W.4.2b, W.4.8*)
- Use precise vocabulary to inform about your animal. (*W.4.2d*)
- Provide a concluding statement that restates the focus statement. (*W.4.2e*)
- Synthesize information from at least two research sources. (*RI.4.9, W.4.7, W.4.8*)
- Use vocabulary from your research on animal defense mechanisms to accurate descriptions throughout the piece. (*W.4.2d, L.4.3a, L.4.6*)
- Use correct capitalization and spell fourth-grade words correctly.

Use the following planning graphic organizer to plan your informative piece before writing your draft.
**Focus Question:** How does my expert group animal use its body and behaviors to help it survive?

**Introduction Paragraph**
Describe your animal.

Details:
- What is my animal?
- What does my animal look like?
- Where does it live?
- What are its predators?

**Detail Paragraph 1**
What is one defense mechanism my animal uses?

How/when would my animal use this defense mechanism?

Details:
- 
- 
- 

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**Informative Page Planning Graphic Organizer**

<table>
<thead>
<tr>
<th>Detail Paragraph 2</th>
<th>Concluding Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is another defense mechanism my animal uses?</td>
<td>Restate your focus statement from the introduction.</td>
</tr>
<tr>
<td>How/when would my animal use this defense mechanism?</td>
<td></td>
</tr>
<tr>
<td>Details:</td>
<td></td>
</tr>
<tr>
<td>•</td>
<td></td>
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<td>•</td>
<td></td>
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<td>•</td>
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</tbody>
</table>

**My Sources:** List any sources you used in planning your informative piece.

**Vocabulary from my research to be used:**

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**NYS Common Core ELA Curriculum • G4:M2B:U2:L7 • June 2014 • 16**
### Focus Question:
How does my expert group animal use its body and behaviors to help it survive?

### Focus Statement:
To protect themselves from predators, millipedes have two main defense mechanisms. When they’re near a predator, they might roll into a ball or ooze poison.

<table>
<thead>
<tr>
<th>Introduction Paragraph</th>
<th>Detail Paragraph 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe your animal.</td>
<td>What is one defense mechanism my animal uses?</td>
</tr>
<tr>
<td>Details:</td>
<td>-rolling into a ball</td>
</tr>
<tr>
<td>What is my animal?</td>
<td>How/when would my animal use this defense mechanism?</td>
</tr>
<tr>
<td>the millipede</td>
<td>-When a predator comes near, it rolls into a ball.</td>
</tr>
<tr>
<td>What does my animal look like?</td>
<td>Details:</td>
</tr>
<tr>
<td>-20–100 body segments</td>
<td>The hard exoskeleton protects its body from the predator.</td>
</tr>
<tr>
<td>-two pairs of legs on each segment</td>
<td>They look like little pebbles, so the predator ignores them.</td>
</tr>
<tr>
<td>-hard exoskeleton</td>
<td>Body segments make it easy to roll.</td>
</tr>
<tr>
<td>-long and skinny</td>
<td></td>
</tr>
<tr>
<td>Where does it live?</td>
<td>Detail Paragraph 2</td>
</tr>
<tr>
<td>-lives outdoors in damp areas like the forest floor</td>
<td>What is another defense mechanism my animal uses?</td>
</tr>
<tr>
<td>-lives in our houses—basements</td>
<td>-emits poison</td>
</tr>
<tr>
<td>What are its predators?</td>
<td>How/when would my animal use this defense mechanism?</td>
</tr>
<tr>
<td>-ants and toads</td>
<td>-oozes poison when attacked</td>
</tr>
<tr>
<td>Details:</td>
<td>Details:</td>
</tr>
<tr>
<td>The hard exoskeleton protects its body from the predator.</td>
<td>Droplets are sticky and stick to predators. While the predator tries to clean off the fluid, it gets stickier and the millipede escapes.</td>
</tr>
<tr>
<td>They look like little pebbles, so the predator ignores them.</td>
<td>The poison can paralyze or kill the predators.</td>
</tr>
<tr>
<td>Body segments make it easy to roll.</td>
<td>The poison smells, and when predators smell it, they run away.</td>
</tr>
<tr>
<td>My Sources: List any sources you used in planning your informative piece.</td>
<td>Vocabulary from my research to be used:</td>
</tr>
<tr>
<td>Animal Behavior: Animal Defenses</td>
<td>emit</td>
</tr>
<tr>
<td>Venom</td>
<td>exoskeleton</td>
</tr>
</tbody>
</table>

**Name:** Millipede model

**Date:**

---

**Vocabulary from my research to be used:**
emit
exoskeleton
paralyze
predator
threaten
**Focus Question:** How does my expert group animal use its body and behaviors to help it survive?

**Focus Statement:** The armadillo has many ways of protecting itself.

**Name:** Armadillo model

**Date:**  

<table>
<thead>
<tr>
<th>Introduction Paragraph</th>
<th>Detail Paragraph 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe your animal.</td>
<td>What is one defense mechanism my animal uses?</td>
</tr>
<tr>
<td></td>
<td>- runs away and lets its hard armor protect it</td>
</tr>
<tr>
<td>Details:</td>
<td>How/when would my animal use this defense mechanism?</td>
</tr>
<tr>
<td>What is my animal?</td>
<td>- The armor protects the armadillo when a predator attacks it.</td>
</tr>
<tr>
<td>the three-banded armadillo</td>
<td>Details:</td>
</tr>
<tr>
<td>What does my animal look like?</td>
<td>The armor is hard.</td>
</tr>
<tr>
<td>- powerful claws</td>
<td>Scientists call the armor carapace.</td>
</tr>
<tr>
<td>- sticky tongue</td>
<td>The armor is made up of bony plates and is arranged in bands around the armadillo’s body.</td>
</tr>
<tr>
<td>- curls into a ball</td>
<td>The shell is good insulation and keeps the armadillo warm in the winter.</td>
</tr>
<tr>
<td>- covered in thick plates</td>
<td>Where does it live?</td>
</tr>
<tr>
<td>- plates form an armor called carapace</td>
<td>- South America</td>
</tr>
<tr>
<td></td>
<td>- marsh</td>
</tr>
<tr>
<td></td>
<td>- grasslands</td>
</tr>
<tr>
<td>Where does it live?</td>
<td>What are its predators?</td>
</tr>
<tr>
<td>- South America</td>
<td>- jaguars, alligators, humans</td>
</tr>
<tr>
<td>- marsh</td>
<td></td>
</tr>
<tr>
<td>- grasslands</td>
<td></td>
</tr>
<tr>
<td>What are its predators?</td>
<td></td>
</tr>
<tr>
<td>- jaguars, alligators, humans</td>
<td></td>
</tr>
<tr>
<td>Detail Paragraph 2</td>
<td>Detail Paragraph 2</td>
</tr>
<tr>
<td>What is another defense mechanism my animal uses?</td>
<td></td>
</tr>
<tr>
<td>- rolling into a ball</td>
<td>What is another defense mechanism my animal uses?</td>
</tr>
<tr>
<td>How/when would my animal use this defense mechanism?</td>
<td></td>
</tr>
<tr>
<td>- when a predator attacks</td>
<td>- rolling into a ball</td>
</tr>
<tr>
<td>Details:</td>
<td>How/when would my animal use this defense mechanism?</td>
</tr>
<tr>
<td>Each band of armor is separated from the others by a band of skin, which lets the armadillo flex its body and roll up. The shoulder and haunch plates aren’t attached on the sides to the armadillos’ skin, so there’s room inside to fit a head, legs, and tail. Rolling into a ball protects its head, legs, and tail, which aren’t covered by the armor otherwise. When an armadillo is rolled into a ball, the shell protects its body. It’s difficult for a predator to crack open the armadillo’s shell.</td>
<td></td>
</tr>
</tbody>
</table>

**Concluding Statement**

Restate your focus statement from the introduction.

The armadillo protects itself with its hard armor and by rolling into a ball.
My Sources: List any sources you used in planning your informative piece.

*Animal Behavior: Animal Defenses*
“Award-Winning Survival Skills”

Vocabulary from my research to be used:
- armor
- plates
- flex
**Focus Question:** How does my expert group animal use its body and behaviors to help it survive?

**Focus Statement:** The gazelle has many ways of protecting itself.

**Name:** Gazelle model

**Date:**

---

### Introduction Paragraph
Describe your animal.

Details:
- What is my animal? the gazelle
- What does my animal look like? brownish coat, black horns, black stripe on sides, white patch on back, long legs
- Where does it live? South Africa, grasslands
- What are its predators? lions, cheetahs, wild dogs

### Detail Paragraph 1
What is one defense mechanism my animal uses? hiding

How/when would my animal use this defense mechanism? when a predator approaches

Details:
- Fawns have tawny coats that blend in with the grass.
- Fawns can lie still for a long time, so the grass doesn’t move and the predator doesn’t notice them.
- Hiding, freezing, or blending in with their habitat is called crypsis.

### Detail Paragraph 2
What is another defense mechanism my animal uses? running away

How/when would my animal use this defense mechanism? when a predator starts to come close

Details:
- Gazelles jump or bounce with their backs arched and legs stiff, which is called stotting or pronking.
- Stotting lets the predator know the gazelles are strong, healthy, and faster than the predator.
- Stotting also warns other gazelles that a predator is close, so the predator loses its chance of a surprise attack.

### Concluding Statement
Restate your focus statement from the introduction.

The gazelle protects itself by blending in with its habitat or running away.

---

**My Sources:** List any sources you used in planning your informative piece.

*Animal Behavior: Animal Defenses*

Web page: http://www.arkive.org/springbok/antidorcas-marsupialis/

**Vocabulary from my research to be used:**
- crypsis
- stotting or pronking
- herd
Focus Question: How does my expert group animal use its body and behaviors to help it survive?

Focus Statement: The mimic octopus protects itself by imitating other animals.

Name: Mimic Octopus model

Date:

<table>
<thead>
<tr>
<th>Introduction Paragraph</th>
<th>Detail Paragraph 1</th>
<th>Detail Paragraph 2</th>
<th>Concluding Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe your animal.</td>
<td>What is one defense mechanism my animal uses?</td>
<td>What is another defense mechanism my animal uses?</td>
<td>Restate your focus statement from the introduction.</td>
</tr>
<tr>
<td>Details:</td>
<td>- mimicking the sole</td>
<td>- mimicking the poisonous lionfish</td>
<td>The mimic octopus protects itself by mimicking different animals.</td>
</tr>
<tr>
<td>• What is my animal?</td>
<td>How/when would my animal use this defense mechanism?</td>
<td>How/when would my animal use this defense mechanism?</td>
<td></td>
</tr>
<tr>
<td>the mimic octopus</td>
<td>- when a predator approaches</td>
<td>- when a predator starts to come close</td>
<td></td>
</tr>
<tr>
<td>• What does my animal look like?</td>
<td>Details:</td>
<td>Details:</td>
<td></td>
</tr>
<tr>
<td>- stripes</td>
<td>• It’s the only animal that can mimic more than one other animal.</td>
<td>• The octopus spreads out its arms and lets them dangle, twists its body, and changes its stripes to look like a lionfish.</td>
<td></td>
</tr>
<tr>
<td>- no shell and no bones</td>
<td>• Mimicking other animals lets the octopus hide in plain sight.</td>
<td>• The predator thinks it’s a lionfish, which are poisonous, so it stays away.</td>
<td></td>
</tr>
<tr>
<td>- eight arms</td>
<td>• It can change the color and shape of its body.</td>
<td>• The octopus pulls its arms together and moves like the sole.</td>
<td></td>
</tr>
<tr>
<td>• Where does it live?</td>
<td>• Sole are common, so predators aren’t interested in them and ignore them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- along the muddy ocean floor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- off the coast of Indonesia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• What are its predators?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- damselfish, sharks, barracudas</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

My Sources: List any sources you used in planning your informative piece.

Animal Behavior: Animal Defenses
“Award-Winning Survival Skills”

Web page:

Vocabulary from my research to be used:
mimic
imitate
common
Focus Question: How does my expert group animal use its body and behaviors to help it survive?

Focus Statement: The monarch butterfly protects itself in several ways.

Name: Monarch model

Date:

Introduction Paragraph
Describe your animal.

Details:
• What is my animal?
  monarch butterfly

• What does my animal look like?
  - black, white, and bright orange wings
  - white dots along the wings
  - black body

• Where does it live?
  - America, Mexico

• What are its predators?
  - birds, praying mantises

Detail Paragraph 1
What is one defense mechanism my animal uses?
- poison

How/when would my animal use this defense mechanism?
- when a predator eats it

Details:
• They get their poison from eating milkweed plants when they are caterpillars.
• The poison tastes bad, so the predator drops the butterfly, letting it escape.
• The poison doesn’t kill the monarch’s enemy, but it makes it sick.
• The predator learns to stay away from the butterfly.

Detail Paragraph 2
What is another defense mechanism my animal uses?
- warning colors

How/when would my animal use this defense mechanism?
- when a predator starts to come close

Details:
• The monarch is bright orange, black, and white.
• It has bright warning colors, letting the predator know that it is poisonous.
• The colors and patterns are aposematic, which means they warn predators that the animals have poison.

Concluding Statement
Restate your focus statement from the introduction.

The monarch butterfly protects itself by poisoning its predators.

My Sources: List any sources you used in planning your informative piece.

Animal Behavior: Animal Defenses
Venom


Vocabulary from my research to be used:
warning colors
educated
### Long-Term Target Addressed (Based on NYSP12 ELA CCLS)

I can introduce a topic clearly. (W.4.2a)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can write an introduction paragraph for my informative piece that describes my expert group animal, its habitat, and its predators.</td>
<td>• Draft of introduction paragraph</td>
</tr>
<tr>
<td>• I can write a focus statement that answers the focus question and tells the topic of my writing.</td>
<td></td>
</tr>
<tr>
<td>Agenda</td>
<td>Teaching Notes</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
</tr>
<tr>
<td>1. Opening</td>
<td>• In this lesson, students begin drafting the informative page for their performance task. This lesson focuses on drafting the introduction paragraph.</td>
</tr>
<tr>
<td>A. Engaging the Writer and Reviewing Learning Targets (5 minutes)</td>
<td>• Students follow along as the teacher reads aloud the introductions from two texts from Units 1 and 2: the “Award-Winning Survival Skills” article and the section “Poisonous Prey” from Animal Behavior: Animal Defenses. Then they discuss how these authors crafted effective introductions, and these points are recorded on the Effective Introductions anchor chart. A copy of each introduction is posted next to its corresponding points. Students will refer to these models as they craft their own introductory paragraphs in Work Time D.</td>
</tr>
<tr>
<td>2. Work Time</td>
<td>• After examining these models, students move on to craft focus statements for their informative pages. A focus statement is similar to a topic sentence in that it states the main idea of the writing. It also answers the focus question in a succinct way. Be sure to remind students that a focus statement is short and to the point and does not go into detail answering the focus question.</td>
</tr>
<tr>
<td>A. Criteria for Introductions (5 minutes)</td>
<td>• Students end Work Time by using their Informative Page Planning graphic organizers to write a draft of their introduction paragraphs.</td>
</tr>
<tr>
<td>B. Examining Models of Introductions (15 minutes)</td>
<td>• Then, students take time in the Closing to read their introductions aloud to a partner who is not in their expert group and receive feedback. The purpose of this is to share with someone who is unfamiliar with the expert group animal and therefore more likely to notice information that may be unclear or missing from the introduction paragraph.</td>
</tr>
<tr>
<td>C. Guided Practice: Writing a Focus Statement (10 minutes)</td>
<td>• In advance:</td>
</tr>
<tr>
<td>D. Drafting an Introduction Paragraph (20 minutes)</td>
<td>– Create and post the Effective Introductions anchor chart (see the supporting materials).</td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td>– Review the Informative Page Directions. Although students read through these directions in Lesson 7, being familiar with them yourself will help you more effectively support students as they write their introductions and focus statements in this lesson.</td>
</tr>
<tr>
<td>A. Share (5 minutes)</td>
<td>• Post: Learning targets.</td>
</tr>
<tr>
<td>4. Homework</td>
<td>• Finish the introduction.</td>
</tr>
</tbody>
</table>
## Lesson Vocabulary

- introduction, focus statement

## Materials

- Effective Introductions anchor chart (new; teacher-created; see supporting materials)
- Document camera
- “Award-Winning Survival Skills” (from Unit 1, Lesson 2; one per student and paragraphs 1-3 to display)
- Equity sticks
- *Animal Behavior: Animal Defenses* (book; from Unit 1; one per student and one to display)
- *Animal Behavior: Animal Defenses* (one to display; specifically the very first paragraph)
- Informative Page Planning graphic organizer (from Lesson 7; one per student and one to display)
- Millipede informative piece draft (for teacher reference)
- Lined paper (several pieces per student)
- Informative Page Directions (from Lesson 7; one per student and one to display)
<table>
<thead>
<tr>
<th>Opening</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Engaging the Writer and Reviewing Learning Targets (5 minutes)</strong></td>
<td>• Discussing and clarifying the language of learning targets helps build academic vocabulary.</td>
</tr>
<tr>
<td>- Ask students if they’ve ever picked up a book or some other piece of writing and read a few sentences, then decided to put it down.</td>
<td></td>
</tr>
<tr>
<td>- Acknowledge that most readers have done this. Readers don’t want to waste their time reading something that doesn’t interest them. Most readers decide if a piece of writing is going to be interesting by reading the beginning of it. That’s why beginnings are so important.</td>
<td></td>
</tr>
<tr>
<td>- Review the steps of the writing process by asking:</td>
<td></td>
</tr>
<tr>
<td>* “What steps do writers go through when writing a text?”</td>
<td></td>
</tr>
<tr>
<td>- Listen for students to explain that writers plan, draft, revise, edit, and publish their writing. Ask:</td>
<td></td>
</tr>
<tr>
<td>* “Where are we in the writing process for writing our informative pieces?”</td>
<td></td>
</tr>
<tr>
<td>- Listen for students to say that they have researched and planned their pieces.</td>
<td></td>
</tr>
<tr>
<td>- Direct their attention to the learning targets and ask for volunteers to read them:</td>
<td></td>
</tr>
<tr>
<td>* “I can write an introduction paragraph for my informative piece that describes my expert group animal, its habitat, and its predators.”</td>
<td></td>
</tr>
<tr>
<td>* “I can write a focus statement that answers the focus question and tells the topic of my writing.”</td>
<td></td>
</tr>
<tr>
<td>- Ask students if they are unfamiliar with any of the words in the learning targets. They might identify these words:</td>
<td></td>
</tr>
<tr>
<td>– <em>introduction</em> – opening, beginning</td>
<td></td>
</tr>
<tr>
<td>– <em>focus statement</em> – answers the focus question, tells the topic of the piece</td>
<td></td>
</tr>
<tr>
<td>- Write the synonym above the targeted word(s) in the learning targets and ask two more students to reread the targets.</td>
<td></td>
</tr>
<tr>
<td>- Ask students to show you a thumbs-up if they understand what they will be learning today, a thumbs-sideways if they need some more clarification, and a thumbs-down if they still don’t know. Clarify as necessary.</td>
<td></td>
</tr>
</tbody>
</table>
# Writing Informational Texts: Crafting Introductions

## Work Time

### A. Criteria for Introductions (5 minutes)
- Explain that in narratives we call the beginning of a piece “the beginning,” but in informational writing we call the beginning an “introduction.” It’s similar but just has different purposes and audiences. Explain that in all writing, the author needs to make sure his or her piece begins in a way that is appropriate for the audience, grabs the reader’s attention, and makes them want to read more.
- Explain that an effective introduction has three pieces. Refer to the posted Effective Introductions anchor chart. Ask students to read the anchor chart silently to themselves:
  - Catches the reader’s attention: hooks a reader into wanting to read more
  - Provides context—necessary background information—so that the reader can understand the information in the piece
  - Is appropriate to purpose and audience: the writer thinks carefully about who will be reading this piece and why when deciding what information and words to use
- Check for understanding by having students put their hands on their heads if they understand what these mean or hands on their shoulders if they somewhat understand but need some clarification. Clarify as needed.

## Meeting Students’ Needs
- Putting copies of anchor charts in students’ research folders will give them personal access to important information as they work independently.
### Work Time (continued)

**B. Examining Models of Introductions (15 minutes)**

- Ask students to take out their own copy of “Award-Winning Survival Skills.” Use a document camera to display paragraphs 1-3.

- Remind them that they should be familiar with the content of this article because they read it in Unit 1 when they were learning to determine the main idea and in Unit 2 to gather research about their expert group animal. *(Note: If you feel that your students need to review the content of this text before proceeding with this lesson, briefly read the text aloud as they follow along.)*

- Read the first three paragraphs aloud as students follow along. Ask students to think about how the author designed the introduction so that it gave the reader important information and grabbed the reader’s attention about the topic.

- Once you’ve finished reading, ask students to turn and talk:
  - “How did the author design the introduction so it grabbed the reader’s attention and gave important information?”

- Use equity sticks to cold call one or two students. Listen for responses like: “The author started by giving examples of animal defense mechanisms,” “She started by asking a question to get the reader curious about the answer,” and “She ended with a sentence that explained what a reader can learn about when reading the article.”

- Point to the Effective Introductions anchor chart and document students’ observations by writing the following in the left-hand column of the anchor chart:
  - Introduction #1:
    - Begins by asking a question
    - Gives examples of animal defense mechanisms
    - Ends with a sentence that explains what the reader will learn about

- Post a copy of the introduction paragraphs in the right-hand column. Students will refer to these model examples as they draft their own introductions in Work Time D.

- Display the *Animal Behavior: Animal Defenses* and open to “Poisonous Prey” on page 56. Ask students to get out their copies of the text and open to page 56. Focus students on the first paragraph on page 56.

- Again, remind the students that they should be familiar with the content of this text because they read it in Unit 1 (Lesson 5) when they did a guided close read of this section. *(Note: If you feel that your students need to review the content of this text before proceeding with this lesson, briefly read the text aloud as they follow along.)*

### Meeting Students’ Needs

- Throughout this unit and Unit 3, students read and use mentor texts. Mentor texts are model texts, written by real authors, that students examine to see strong examples of writing craft. In this unit, students analyze various examples of informational texts. For more information on the use of mentor texts, read *Study Driven* by Katie Wood Ray.
### Work Time (continued)

- Ask the students to turn to a shoulder partner and read the first paragraph aloud together. After they’ve read it, ask them to discuss how they think this section begins. Is it the same as the introduction from “Award-Winning Survival Skills”? Is it different?

- Invite partnerships to find another partnership to share their thinking. Once the foursome has a collective understanding of how the introduction was designed to grab the attention, ask them all to raise their hands so that they form a silent “tepee” of hands.

- When all groups have their hands up, ask one person from each group to share. Listen for responses like: “This one started by describing how poisonous animals use their poison” or “The author ended the paragraph with a sentence that made the reader interested in reading more about how animals use their poison.”

- Document their observations on the chart by writing in the left-hand column:
  - Introduction #2:
    - Begins by describing the topic
    - Hooks the reader in the last sentence

- Post a copy of the first paragraph on page 56 *Animal Behavior: Animal Defenses* in the right-hand column.
## Work Time (continued)

### C. Guided Practice: Writing a Focus Statement and Introduction (10 minutes)

- Tell students that one thing both of the example introductions had in common was ending with a sentence that stated the topic of the article or section of text. Explain that this is called the thesis or focus statement.

- Invite students to take out their **Informative Page Planning graphic organizer** and display the millipede model started in Lesson 7. Point out the focus question at the top of the graphic organizer and cold call a student to read it aloud:
  
  * “How does my expert group animal use its body and behaviors to help it survive?”

- Explain that a focus statement is brief and to the point, and answers the focus question.

- Rephrase the focus question so it is specific to the millipede and invite students to Think-Pair-Share. Ask:
  
  * “How does the millipede use its body and behaviors to help it survive?”

- Cold call a few students to share out. Listen for responses like: “The millipede has many ways of protecting itself” or “The millipede protects itself by rolling into a ball and using poison.” As students share out, write their examples on the board.

- Choose one example focus statement from the student-generated list and write it on the millipede Informative Page Planning graphic organizer in the Focus Statement box.

- Invite students to Ink-Pair-Share a focus statement for their own piece, writing the focus statement in the appropriate box on their Informative Page Planning graphic organizer. Give them 5 minutes to do so, circulating and supporting as needed. Look for students writing focus statements that answer the focus question for their expert group animal.

- Ask students to help you draft the introduction of the millipede informative piece. Ask:
  
  * “What should we refer to while drafting our introductions?”

- Listen for responses like: “our planning graphic organizer” or “the introduction part of our graphic organizer.”

- Invite students to turn and talk to a partner. Ask them to reread the millipede Informative Page Planning graphic organizer together. Ask:
  
  * “Think about your ideas: What will be described in the introduction?”

- Use equity sticks to call on students to share what they talked about with their partner. Listen for responses like: “what the millipede looks like, where it lives, and its predators.”

- If necessary, explain that the focus statement will also be included in the introduction.
### Work Time (continued)

- Drawing from the ideas students shared, craft and write a sentence that introduces the topic and describes the millipede. (See millipede informative piece draft in the supporting materials). Continue this process to write the rest of the introduction paragraph.
- Invite students to chorally read the finished introduction about the millipede.

### Meeting Students’ Needs

- During independent work, the teacher can support students with special needs or ELLs as needed. Just be sure to let them, too, struggle with the task, as successful completion after considerable effort builds both stamina and confidence.

### D. Drafting an Introduction Paragraph (20 minutes)

- Distribute lined paper and tell students that they are about to complete a draft of their introduction paragraph for their informative page. Remind them that since it is a first draft, it does not have to be perfect.
- Students should reference the criteria for an introduction on the Informative Page Directions and be encouraged to refer frequently to the Effective Introductions anchor chart when drafting.
- Remind them that when they write a draft, they should skip lines so they have room to make revisions and edits later in the writing process.
- Give students 20 minutes to write their introductory paragraphs. Circulate and support them as needed. Be sure to confer with students whom you observed struggling with planning their writing in Lesson 7. Help them focus on getting their ideas down on paper as opposed to worrying about spelling or grammar. Remind them that they will edit their writing toward the end of the writing process.
# Writing Informational Texts: Crafting Introductions

## Closing and Assessment

<table>
<thead>
<tr>
<th>A. Share (5 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Invite students to find a partner from a different expert group.</td>
<td></td>
</tr>
<tr>
<td>• Ask them to read their introduction aloud to their partner. While one partner</td>
<td></td>
</tr>
<tr>
<td>reads his or her introduction aloud, the other partner should listen for the</td>
<td></td>
</tr>
<tr>
<td>required information (physical description of the animal, its habitat, and its</td>
<td></td>
</tr>
<tr>
<td>predators) and the focus statement, providing feedback on whether anything is</td>
<td></td>
</tr>
<tr>
<td>missing from the introduction. Then, the partners should repeat, switching roles.</td>
<td></td>
</tr>
<tr>
<td>• Explain that, for homework, students should finish drafting their introductions</td>
<td></td>
</tr>
<tr>
<td>or adding any missing information based on their partner’s feedback.</td>
<td></td>
</tr>
</tbody>
</table>

## Homework

<table>
<thead>
<tr>
<th></th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Finish your introduction.</td>
<td></td>
</tr>
</tbody>
</table>

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Teacher directions: Write the following on chart paper to create this anchor chart.

**Effective Introductions**

- **Catches the reader’s attention**—hooks a reader into wanting to read more
- **Makes the reader want to read more**—necessary background information—so that the reader can understand the information in the piece
- **Is appropriate to purpose and audience**—the writer thinks carefully about who will be reading this piece and why when deciding what information and words to use

<table>
<thead>
<tr>
<th>How the Introduction Is Effective</th>
<th>Example Text</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Teacher directions: This is a sample of what may be created with students during Work Time C. This model will be added to in subsequent lessons; there are conventions mistakes in it intentionally that will be used to model editing in Lesson 11.

The millipede is a relative of the centipede. They have twenty to one hundred body segments, and too pairs of legs on each segment. Millipedes like to be in damp areas. In the wild, they live on moist forest floors. Some millipedes live in our houses! They like to live in bathrooms and basements because they're damp. Millipedes aren’t fast. They roll into balls and eat leaves or decaying vegetation. Their main predators are ants, toads, and mice. To protect themselves from predators, millipedes have two main defense mechanisms. When they're near a predator, they might roll into a ball or ooze poison.
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can develop the topic with facts, definitions, details, and quotations. (W.4.2b)
I can construct a concluding statement or section of an informative/explanatory text. (W.4.2e)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can write body paragraphs for my informative piece that describe the defense mechanisms of my expert group animal.</td>
<td>• Draft of body paragraphs</td>
</tr>
<tr>
<td>• I can write a concluding statement for my informative piece that summarizes the defense mechanisms of my expert group animal.</td>
<td></td>
</tr>
<tr>
<td>• I can group together scientifically accurate facts with related evidence in my informative piece.</td>
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**GRADE 4: MODULE 2B: UNIT 2: LESSON 9**

**Writing Informational Texts:** Developing Body Paragraphs

### Agenda

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<td>C. Guided Practice: Writing a Body Paragraph and a Concluding Statement (10 minutes)</td>
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<td>D. Drafting Body Paragraphs (20 minutes)</td>
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<td>A. Share (5 minutes)</td>
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<th>Homework</th>
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<tr>
<td>A. Finish your body paragraphs.</td>
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<tr>
<td>B. In your Expert Group Animal research journal, complete a 3rd draft sketch on the Sketch Page.</td>
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### Teaching Notes

- The flow of this lesson is similar to Lesson 8. In this lesson, students continue drafting the informative page for their Performance Task. This lesson focuses on drafting the body paragraphs. Note that the concluding statement should come at the end of students’ second body paragraph. It will not be given its own paragraph.

- Similar to Lesson 8, students examine model body paragraphs before crafting their own. They follow along as the teacher reads aloud body paragraphs from two texts from Units 1 and 2: “Award-Winning Survival Skills” and “Poisonous Prey” from *Animal Behavior: Animal Defenses*. Then students discuss how these authors crafted effective body paragraphs, and these points are recorded on the Effective Body Paragraphs anchor chart. A copy of the body paragraphs are posted next to their corresponding points on the anchor chart. Students will refer to these models as they craft their own body paragraphs in Work Time D.

- Students then work to craft concluding statements for their pieces. A concluding statement is similar to a focus statement in that it answers the focus question in a succinct way. Be sure to remind students that a concluding statement is short and to the point, like a focus statement, and does not go into detail answering the focus question. Also remind students that it restates the answer to the focus question, so it should be different from the focus statement.

- As in Lesson 8, students end Work Time by using their Informative Page Planning graphic organizers to write a draft of their body paragraphs.

- Then, students take time in the Closing to read their introductions aloud to a partner who is not in their expert group and receive feedback. The purpose of this is to share with someone who is unfamiliar with the expert group animal and therefore more likely to notice information that may be unclear or missing from the introduction paragraph.

- In advance: Create and post the Developing Body Paragraphs anchor chart (see supporting materials).

- Review Whip Around or “Go ‘Round” in Checking for Understanding techniques (see Appendix).

- Post: Learning targets.
<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>body paragraphs, concluding statement, scientifically accurate, restating</td>
<td>• Expert Group Animal research journals (from Lesson 2; one per student and one to display)</td>
</tr>
<tr>
<td></td>
<td>• Informative Page Directions (from Lesson 7; one per student and one to display)</td>
</tr>
<tr>
<td></td>
<td>• Developing Body Paragraphs anchor chart (new; teacher-created; see supporting materials)</td>
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<tr>
<td></td>
<td>• Informative Page Planning graphic organizer (from Lesson 7; one per student and one to display)</td>
</tr>
<tr>
<td></td>
<td>• “Award-Winning Survival Skills” (from Unit 1, Lesson 2; one per student and one to display)</td>
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<td>• Document camera</td>
</tr>
<tr>
<td></td>
<td>• Equity sticks</td>
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<td></td>
<td>• Animal Behavior: Animal Defenses (book; from Unit 1; one per student and one to display)</td>
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<tr>
<td></td>
<td>• Millipede Informative Piece Draft (for teacher reference)</td>
</tr>
<tr>
<td></td>
<td>• Informative piece drafts (from Lesson 8; one per student)</td>
</tr>
<tr>
<td></td>
<td>• Lined paper (several pieces per student)</td>
</tr>
<tr>
<td></td>
<td>• Sketch page (page 12 of Expert Group Animal research journal; for homework)</td>
</tr>
</tbody>
</table>
A. **Reviewing Learning Targets (5 minutes)**

- Direct students’ attention to the learning targets and ask for volunteers to read them aloud:
  - “I can write body paragraphs for my informative piece that describe the defense mechanisms of my expert group animal.”
  - “I can write a concluding statement for my informative piece that summarizes the defense mechanisms of my expert group animal.”
  - “I can group together scientifically accurate facts with related evidence in my informative piece.”

- Ask students if they are unfamiliar with any words in the learning targets. They might identify these words:
  - *body paragraphs* – paragraphs that develop the topic with facts, definitions, details, and quotations
  - *concluding statement* – answers the focus question; restates the focus statement
  - *scientifically accurate* – means the science has to be right, or reasons and evidence have to be based on research

- Write the synonym above the word(s) in the learning targets and ask for new volunteers to read the targets again. Ask students to show you a thumbs-up if they understand what they will be learning today, a thumbs-sideways if they need some more clarification, and a thumbs-down if they still don’t know. Clarify as necessary.

- For the last target, ask students to turn and talk:
  - “What does it mean to ‘group accurate facts with related evidence’?”
  - Listen for explanations like: “It means our evidence has to match our facts.”

- **Meeting Students’ Needs**
  - Discussing and clarifying the language of learning targets helps build academic vocabulary.
Work Time

A. Criteria for Body Paragraphs (5 minutes)

- Review the steps of the writing process by asking:
  * “Where are we in the writing process for writing our informative pieces?”
- Listen for students to say that they have researched and planned their pieces and have begun drafting.
- Explain that in informational writing, we call the middle paragraphs of a piece of writing the body paragraphs. Tell students that in these paragraphs, the author develops the topic with facts, definitions, details, and quotations from research.
- Invite students to take out their Informative Page Directions and read the second and third criteria:
  * “Use paragraphs to group related facts and evidence.”
  * “Use facts and details to describe two of your animal’s defense mechanisms.”
- Explain that students will focus on these criteria when writing their body paragraphs.
- Direct students to the posted Developing Body Paragraphs anchor chart:
  - Paragraphs are grouped with related facts and evidence.
  - Facts and details are used to describe the topic.
- Display the millipede model of the Informative Page Planning graphic organizer. Ask students to turn and talk:
  * “How many paragraphs have we planned?”
- Listen for them to notice that there will be three paragraphs. Point out that the concluding statement will be at the end of the second body paragraph and will not be its own paragraph. Ask:
  * “What should each body paragraph contain (based on your plans and what you know about the characteristics of informational texts)?”
- Listen for responses like: “Each body paragraph should describe one defense mechanism the expert group animal uses, how or when the animal uses that defense mechanism, and details about the defense mechanism.” Ask:
  * “What are the features of a strong paragraph?”
- Listen for responses like: “A strong paragraph has a topic sentence, details, and concluding sentence.”

Meeting Students’ Needs

- Putting copies of anchor charts in students’ research folders will give them personal access to important information as they work independently.
B. Examining Models of Body Paragraphs (15 minutes)

- Ask students to get out their copy of “Award-Winning Survival Skills.” Use a document camera to display the first paragraph on page 10.

- Remind students that they should be familiar with the content of this article because they read it in Unit 1 when they were learning to determine the main idea and in Unit 2 to gather research about their expert group animal. (Note: If you feel that your students need to review the content of this text before proceeding with this lesson, briefly read the text aloud as they follow along.)

- Tell students that this is a body paragraph from this text. Read it aloud as students follow along. As you read, ask students to think about how the author designed the body paragraph to develop the topic.

- Once you’ve finished reading, ask students to turn and talk to a neighbor:
  * “How did the author design the body paragraph to develop the topic?”

- Use equity sticks to cold call one or two students. Listen for responses like: “The author shared facts about the armadillo” or “She started by describing the body shield and then gave details about it.”

- Point to the Developing Body Paragraphs anchor chart and document their observations by writing the following in the left-hand column:
  - Body Paragraph #1:
    - Describes the body shields
    - Gives more details about the body shield using scientific vocabulary

- Post a copy of the body paragraph in the right-hand column. Students will refer to this model as they draft their own body paragraphs in Work Time D.

- Ask students to get out their copy of Animal Behavior: Animal Defenses and open it to “Poisonous Prey” on page 56. Display the second paragraph of the section. Again, remind students that they should be familiar with the content of this text because they read it in Unit 1, Lesson 5 when they did a guided close read of this section. (Note: If you feel that your students need to review the content of this text before proceeding with the lesson, briefly read the text aloud as they follow along.)

- Ask students to turn to a shoulder partner and read the first paragraph aloud together. After they’ve read it, ask them to discuss how they think this section begins. Is it the same as the body paragraph from “Award-Winning Survival Skills”? Is it different?

Meeting Students’ Needs

- Throughout this unit and Unit 3, students read a series of mentor texts. Mentor texts are model texts, written by real authors, that students examine to see strong examples of writing craft. In this unit, students analyze various examples of informational texts. For more information on the use of mentor texts, read Study Driven by Katie Wood Ray.
Work Time (continued)

- Invite partnerships to find another partnership to share their thinking. Once the foursome has a collective understanding of how the introduction was designed, ask them all to raise their hands so that they form a silent “tepee” of hands.

- When all groups have their hands up, ask one person from each group to share. Listen for responses like: “This one started by describing how a monarch butterfly uses its poison,” “This paragraph gives an example of the focus statement from the introduction paragraph,” or “This paragraph gives details that support the topic of the section introduced in the introduction.”

- Document their observations on the chart by writing in the left-hand column:
  - Body Paragraph #2:
    - Gives example that support the topic of the section
    - Describes the example using details and evidence
  - Post a copy of the body paragraph in the right-hand column.

C. Guided Practice: Writing a Body Paragraph and a Concluding Statement (10 minutes)

- Tell students that they will need to include a concluding statement in their writing. Ask:
  * “How does a concluding statement help a reader understand a text?”

- Listen for responses such as: “It sums up or wraps up the writing for the reader” or “It reminds the reader what the main topic of the writing was.” Ask:
  * “Where would it make sense to include the concluding statement? In the beginning, middle, or end of the piece? Why?”

- Listen for responses like: “The end, because it restates and wraps the writing up.”

- Explain that, like the focus statement, the concluding statement answers the focus question and reminds the reader what the piece is about. Tell students that it should answer the focus question in a different way than the focus statement, and that this is called restating.

- Invite students to take out their Informative Page Planning graphic organizer.

- Point out the focus question at the top of the graphic organizer and cold call a student to read it aloud:
  * “How does my expert group animal use its body and behaviors to help it survive?”

- Remind students that a focus statement is brief and to the point and answers the focus question, and that this is also true for the concluding statement.
**Work Time (continued)**

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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<tbody>
<tr>
<td>• Rephrase the focus question so it is specific to the millipede and invite students to Think-Pair-Share. Ask:</td>
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<tr>
<td>* “How can we answer this question in a different way than we answered it as the focus statement? ’How does the millipede use its body and behaviors to help it survive?’”</td>
</tr>
<tr>
<td>• Listen for responses such as: “The millipede has many ways of protecting itself” or “The millipede protects itself by rolling into a ball and using poison.”</td>
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<tr>
<td>• When students share out whole group, write examples that are different from the examples used for the focus statement in Lesson 8.</td>
</tr>
<tr>
<td>• Choose one concluding statement from the student-generated list and write on the millipede Informative Page Planning graphic organizer in the Concluding Statement box. Be sure to display this for students to see.</td>
</tr>
<tr>
<td>• Invite students to Ink-Pair-Share a concluding statement for their own piece, writing the concluding statement in the appropriate box on their Informative Page Planning graphic organizer. Give them 5 minutes to do so, circulating and supporting as needed. Look for students writing concluding statements that answer the focus question but are different from their focus statement.</td>
</tr>
<tr>
<td>• Now tell students that you are going to focus on the middle part of the piece—the body paragraphs.</td>
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<tr>
<td>• Ask them to help you draft one body paragraph of the millipede informative piece. Ask:</td>
</tr>
<tr>
<td>* “What should we refer to while drafting our body paragraph?”</td>
</tr>
<tr>
<td>• Listen for responses like: “our planning graphic organizer” or “the introduction part of our graphic organizer.”</td>
</tr>
<tr>
<td>• Invite students to turn and talk to a partner. Ask them to reread the millipede Informative Page Planning graphic organizer together. Ask:</td>
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<tr>
<td>* “Think about your ideas: What will be described in the first body paragraph?”</td>
</tr>
<tr>
<td>• Use equity sticks to call on students to share what they talked about with their partner. Listen for responses like: “one of the millipede’s defense mechanisms” or “how the millipede rolls into a ball to protect itself.”</td>
</tr>
<tr>
<td>• Drawing from the ideas students shared, write a sentence that introduces one of the millipede’s defense mechanisms (see the Millipede Informative Piece Draft in the supporting materials). Continue this process to write the rest of the body paragraph.</td>
</tr>
<tr>
<td>• Invite students to chorally read the finished body paragraph about the millipede.</td>
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### Work Time (continued)

**D. Drafting Body Paragraphs (20 minutes)**

- Invite students to take out their **informative piece drafts** begun in Lesson 8. Have more **lined paper** available for them if needed.

- Tell students that they are about to complete a draft of their body paragraphs for their informative page. Remind them that since it is a first draft, it does not have to be perfect.

- Students should reference the criteria on the Informative Page Directions and be encouraged to refer frequently to the **Effective Body Paragraphs anchor chart when drafting**.

- Remind them that when they write a draft, they should skip lines so they have room to make revisions and edits later in the writing process.

- Give students 20 minutes to write their body paragraphs. Circulate and support them as needed. Be sure to confer with students whom you observed struggling with planning their writing in Lesson 7 and drafting in Lesson 8. Help them to focus on getting their ideas down on paper as opposed to worrying about spelling or grammar. Remind them that they will edit their writing toward the end of the writing process.

- Remind students to include their concluding statement at the end of their second body paragraph, as it will not have its own paragraph.

### Meeting Students’ Needs

- During independent work, the teacher can support students with special needs or ELLs as needed. Just be sure to let them, too, struggle with the task, as successful completion after considerable effort builds both stamina and confidence.
### Closing and Assessment

**A. Share (5 minutes)**
- Invite students to meet with the partner from the Closing of Lesson 8.
- Ask them to read their body paragraphs aloud to their partner. While one partner reads his or her body paragraphs aloud, the other partner should listen for the required information (description of one defense mechanism of their expert group animal in each paragraph and the concluding statement), providing feedback about whether anything is missing. Then, the partners should repeat, switching roles.
- Explain that, for homework, students should finish drafting their body paragraphs or adding any missing information based on their partner’s feedback.

### Homework
- Finish your body paragraphs.
- In your Expert Group Animal research journal, complete a 3rd draft sketch on the Sketch Page.
**Teacher Directions:** Write the following on chart paper to create this anchor chart.

**Developing Body Paragraphs**

- Paragraphs are grouped with related facts and evidence.

- Facts and details are used to describe the topic.

<table>
<thead>
<tr>
<th>Description of Body Paragraphs</th>
<th>Example Text</th>
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Teacher directions: This is a sample of what may be created with students during Work Time C. Note that the introduction paragraph was written in Lesson 8. This model will be added to in subsequent lessons; there are conventions mistakes in it intentionally that will be used to model editing in Lesson 11.

The millipede is a relative of the centipede. They have twenty to one hundred body segments, and too pairs of legs on each segment. Millipedes like to be in damp areas. In the wild, they live on moist forest floors. Some millipedes live in our houses! They like to live in bathrooms and basements because they’re damp. Millipedes aren’t fast. They roll into balls and eat leaves or decayin vegetation. Their main predators are ants, toads, and mice. To protect themselves from predators, millipedes have two main defense mechanisms. When they’re near a predator, they might roll into a ball or ooze poison.

Some millipedes use poison to protect themselves. They do this when the predator touches them. Some poison is sticky. When the poison gets on the predator, it slows the predator down. Another poison is gas, and can be very strong. Some gas is so strong that it can paralyze or kill the predator. Sometimes, other animals rub millipedes all over their bodies to use the poison to repel insects. The millipedes don’t often use their poison, though. They would rather not be attacked in the first place! Millipedes are very special critters. They have unusual and interesting defense mechanisms that keep them safe from predators.
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

<table>
<thead>
<tr>
<th>I can develop the topic with facts, definitions, details, and quotations. (W.4.2b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can use precise, content-specific language/vocabulary to inform or explain about a topic. (W.4.2d)</td>
</tr>
<tr>
<td>I can express ideas using carefully chosen words. (L.4.3a)</td>
</tr>
<tr>
<td>I can accurately use fourth-grade academic vocabulary to express my ideas. (L.4.6)</td>
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</tbody>
</table>

### Supporting Learning Targets

<table>
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<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
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</thead>
<tbody>
<tr>
<td>• I can revise my writing for accurate facts with related evidence using my planning graphic organizer.</td>
<td>• Revisions of informative piece</td>
</tr>
<tr>
<td>• I can use vocabulary from my research on animal defense mechanisms to write accurate descriptions in my informative piece.</td>
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# Agenda

1. **Opening**
   - A. Engaging the Writer: Think-Pair-Share (5 minutes)
   - B. Reviewing Learning Targets (5 minutes)

2. **Work Time**
   - A. Revising for Supporting Details (15 minutes)
   - B. Independent Practice: Revising for Supporting Details (10 minutes)
   - C. Revising for Word Choice (10 minutes)
   - D. Independent Practice: Revising for Word Choice (10 minutes)

3. **Closing and Assessment**
   - A. Setting a Revision Goal (5 minutes)

4. **Homework**
   - A. Finish revising.

## Teaching Notes

- In this lesson, students begin revising the informative page for their performance task. They should have completed their drafts for homework after Lesson 9; if they have not completed their drafts, provide time before this lesson for them to do so.

- Students Think-Pair-Share to open the lesson. With partners, they think about whether they have included details and accurate descriptions in their writing. This exercise gets them thinking about today’s lesson topic and gives the teacher an opportunity to gauge where students stand with these ideas in general and in relation to their writing.

- During Word Times A and C, the teacher models revising the Millipede Informative Piece Draft to add supporting details and vocabulary. Note that the Millipede Informative Piece Draft with Revisions in the supporting materials provides example revisions. When revising for word choice, be sure to include examples of ways to define words in context using parentheses or commas, as this is part of the standard that is often missed.

- Following both Work Times A and C, students are given time for independent practice. During this time, they make revisions to their own informative piece drafts. They use green and red colored pencils to make their revisions, and they do so in the extra lines they left when first drafting their pieces.

- If your district has printed lessons for you in black and white, it may be helpful to view this lesson in color. Go to EngageNY.org or commoncoresuccess.elschools.com and search for 4th grade, Module 2B, Unit 2 lessons.

- In the Closing, students set two revision goals to complete for homework.

- In advance:
  - Create and post the Steps for Revising My Writing anchor chart (see supporting materials).
  - Review the Millipede Informative Piece Draft with Revisions and make changes if necessary, based on the needs of your class.
  - Gather colored pencils.

- Post: Informational Texts anchor chart; Animal Defense Mechanisms Word Wall; learning targets.
### Lesson Vocabulary

<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
</table>
| supporting details      | • Informative piece drafts (from Lesson 8; one per student)  
                           • Informational Texts anchor chart (begun in Lesson 7)  
                           • Informative Page Planning graphic organizer (from Lesson 7; one per student and one to display)  
                           • Millipede Informative Piece Draft (one for display)  
                           • Equity sticks  
                           • Millipede Informative Piece Draft with Revisions (for teacher reference)  
                           • Green colored pencils (one per student)  
                           • Steps for Revising My Writing anchor chart (new; teacher-created; see supporting materials)  
                           • Animal Defenses research journals (from Unit 1, Lesson 1; one per student)  
                           • Expert Group Animal research journals (from Lesson 2; one per student and one to display)  
                           • Animal Defense Mechanisms Word Wall (from Unit 1, Lesson 3)  
                           • Red colored pencils (one per student)  
                           • Informative Page Directions (from Lesson 7; one per student and one to display) |
### Opening

**A. Engaging the Writer: Think-Pair-Share (5 minutes)**
- Ask students to take out their informative piece drafts and Think-Pair-Share with a nearby partner:
  - “Does your writing include details that support the topic? Why or why not?”
  - “Does your writing include accurate descriptions and definitions? Why or why not?”
- Circulate and listen in to gauge students’ understanding of using supporting details and accurate descriptions and definitions in their informative writing.

**B. Reviewing Learning Targets (5 minutes)**
- Review the steps of the writing process by asking:
  - “Where are we in the writing process for writing our informative pieces?”
- Listen for students to say that they have finished planning and drafting their pieces and are now ready to revise their writing.
- Direct students’ attention to the learning targets and read them aloud:
  - “I can revise my writing for accurate facts with related evidence using my planning graphic organizer.”
  - “I can use vocabulary from my research on animal defense mechanisms to write accurate descriptions in my informative piece.”
- Remind them that they have been working on drafting accurate informational pieces, and explain that today they will focus on revising their writing for **supporting details**. These details should be accurate and related to the topic.
- Ask students to turn and talk:
  - “What are supporting details?”
- Listen for responses like: “They are facts, definitions, concrete details, quotations, or other information and examples that relate to and support the topic of the writing.”
- Explain that for the first part of the lesson, students will learn about and then practice revising for supporting details. For the second part of the lesson, they will focus on revising for accurate and precise vocabulary.

### Meeting Students’ Needs

- Discussing and clarifying the language of learning targets helps build academic vocabulary.
### Work Time

**A. Revising for Supporting Details (15 minutes)**
- Remind students that they have been working on writing an informational text.
- Ask them to turn and talk with a partner:
  - “What are some key features of informational writing?”
- Cold call students to share out. Listen for responses mentioning details from the **Informational Texts anchor chart**:
  - Informational texts inform or teach a reader about a topic.
  - Informational texts have a topic sentence with evidence like facts and details that support the topic.
  - Informational texts have precise vocabulary.
  - Informational texts are based on research the author does before writing.
  - Informational texts have pictures or other visuals that support the text.
- Point out that having details that support the topic sentence is one of the most important features of informational texts. Remind students that they spent a lot of time practicing identifying supporting details in informational texts when determining the main idea and summarizing in Unit 1.
- Explain that now their job as authors is to ensure that there are accurate details that support the main idea of their writing so that their topic is developed with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
- Remind students that they planned for and recorded notes about these details on their **Informative Page Planning graphic organizer**. Invite them to take out this graphic organizer, along with their informative piece drafts.
- Tell students that they can use their Informative Page Planning graphic organizer as a revision tool to check their draft for supporting details.
- Model revising the **Millipede Informative Piece Draft** for supporting details using these steps:
  1. Reread your draft while looking at the planning organizer and cross out supporting details on the planning graphic organizer that are included in the draft.
  2. Ask yourself: “Are there any supporting details that I didn’t include in my draft?”
  3. Ask yourself: “Should I include those details in my draft? Would it make my writing more informative?”
  4. Add in any supporting details into the draft.

### Meeting Students’ Needs

- Putting copies of anchor charts in students’ research folders will give them personal access to important information as they work independently.
- Simplifying task directions and/or creating checklists from them are important steps in helping students learn to self-monitor their progress.
<table>
<thead>
<tr>
<th>Work Time (continued)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ask students to think about, then talk with a partner:</td>
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<tr>
<td>* “Where else might I add a detail that develops the topic?”</td>
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<tr>
<td>* “What fact, evidence, or example can I add that makes my writing more informative about the millipede’s defense mechanisms?”</td>
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<tr>
<td>• Use <strong>equity sticks</strong> to call on one or two students to share what they and their partner suggest.</td>
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<tr>
<td>• On the model paragraph, show how to annotate the draft by adding their suggested details with a green colored pencil. Refer to the <strong>Millipede Informative Piece Draft with Revisions</strong> for possible revisions.</td>
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</tbody>
</table>
### B. Independent Practice: Revising for Supporting Details (10 minutes)

- Distribute a **green colored pencil** to each student.
- Tell students that they will be revise their own drafts. During their revising, they will add details that are accurate and develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to their topic.
- Direct students to make their revisions using the green colored pencils.
- Post the **Steps for Revising My Writing anchor chart**:
  - Choose the correct colored pencil. Today’s color is _____.
  - Decide where you are going to add a revision note based on feedback or new learning.
  - Write your revision note in the space above the sentence you want to change.
  - Read through your entire informative piece and continue to record your revision notes.
  - Review your revision notes to be sure they make sense.
- Remind students that they skipped lines when they wrote their drafts in an effort to leave room for these revisions. Explain that these extra lines will make it easy for them to reread their drafts and make changes without having to erase or cross out phrases.
- Give students 10 minutes to add supporting details to their drafts using the steps above. Circulate to confer with and support them as needed.

### Meeting Students’ Needs

- Consider having students who struggle with on-demand writing tasks work with a partner or small group when revising.
C. Revising for Word Choice (10 minutes)

- Bring students back together whole group. Direct their attention to the learning targets and read the first one aloud:
  
  * “I can revise my writing for accurate facts with related evidence using my planning graphic organizer.”

- Invite students to use the Fist to Five Checking for Understanding technique for their progress toward the learning target. Take note of any student who showed a fist, one, or two.

- Direct students’ attention to the Informational Texts anchor chart and point to the third bullet:
  
  * “Informational texts have precise vocabulary.”

- Point out that authors of informational texts make sure to use accurate words and descriptions in their writing. Tell students they will now revise their drafts for precise vocabulary and accurate descriptions.

- Remind them that they have been collecting vocabulary words in the glossaries of their Animal Defenses research journal and Expert Group Animal research journal and on the Animal Defense Mechanisms Word Wall.

- Tell students that they can use these resources as revision tools to check their drafts for precise and accurate vocabulary.

- Model revising the Millipede Informative Piece Draft for vocabulary using these steps (see the supporting materials for possible revisions):
  1. Reread the glossaries of both research journals and the words on the Animal Defense Mechanisms Word Wall.
  2. Ask yourself: “Are there any words or definitions that I could use in my draft that would make it more accurate?” Write these words in the “Vocabulary from my research to be used” box on your Informative Page Planning graphic organizer.
  3. Ask yourself: “Are there any words or definitions that I could use in my draft that would make my writing more precise?” Write these words in the “Vocabulary from my research to be used” box on your Informative Page Planning graphic organizer.
  4. Reread your draft while looking at the planning organizer and add in any words or definitions to your draft.

- Ask students to think about, then talk with a partner:
  * “Where could I add words or definitions to make my writing more accurate or precise?”
  * “What words or definitions could I add?”

- Use equity sticks to call on one or two students to share what they and their partner suggest.

- On the model paragraph, show how to annotate the draft by adding their suggested words or definitions in red colored pencil.
### D. Independent Practice: Revising for Word Choice (10 minutes)

- Distribute a **red colored pencil** to each student.
- Tell them that now they will revise their own drafts. During their revising, they will add words or definitions that are accurate and precise.
- Direct students to make their revisions using the red colored pencils.
- Point again to the Steps for Revising My Writing anchor chart:
  - Choose the correct colored pencil. Today’s color is _____.
  - Decide where you are going to add a revision note based on feedback or new learning.
  - Write your revision note in the space above the sentence you want to change.
  - Read through your entire informative piece and continue to record your revision notes.
  - Review your revision notes to be sure they make sense.
- Remind students that they should write their words and definitions on the blank lines of their drafts.
- Tell them they must add in at least three vocabulary words or definitions to their piece when revising.
- Give students 10 minutes to add words and definitions to their drafts. Circulate to confer with and support them as needed.
- Once students have made their revisions, have them organize their materials in their writing folder. Tell them that they will need to keep this draft as they continue to revise and edit during the coming week.
### Closing and Assessment

**A. Setting a Revision Goal (5 minutes)**
- Explain that students will be able to finish their revisions for homework.
- Ask them to set one or two revision goals to be completed for homework, based on the Informative Page Directions, as well as on their work in today’s lesson. Remind them that today they focused on revising for supporting details and word choice.
- Tell students to write their goal at the top of their informative piece drafts, and then ask them to share their goal with a partner.

### Meeting Students’ Needs

- Developing self-assessment and reflection supports all learners, but research shows it supports struggling learners most.

### Homework

- Finish your revisions.
Teacher directions: This model is to be used during Work Times A and C. Note that the introduction and last paragraphs are from Lessons 8 and 9. There are conventions mistakes in it intentionally that are used to model editing in Lesson 11. The model following this draft shows revisions to be made during the modeling in Work Times A and C.

The millipede is a relative of the centipede. They have twenty to one hundred body segments, and too pairs of legs on each segment. Millipedes like to be in damp areas. In the wild, they live on moist forest floors. Some millipedes live in our houses! They like to live in bathrooms and basements because they’re damp. Millipedes aren’t fast. They roll into balls and eat leaves or decaying vegetation. Their main predators are ants, toads, and mice. To protect themselves from predators, millipedes have two main defense mechanisms. When they’re near a predator, they might roll into a ball or ooze poison.

When a predator is nearby, millipedes often roll into a ball. Because they have so many body segments, it’s easy for them to bend and roll into a tight ball. They have hard exoskeletons. That protects the millipede’s body. The ball hides the millipede from predators because it doesn’t look like a millipede anymore! This is a very useful defense mechanism.

Some millipedes use poison to protect themselves. They do this when the predator touches them. Some poison is sticky. When the poison gets on the predator, it slows the predator down. Another poison is gas, and can be very strong. Some gas is so strong that it can paralyze or kill the predator. Sometimes, other animals rub millipedes all over their bodies to use the poison to repel insects. The millipedes don’t often use their poison, though. They would rather not be attacked in the first place! Millipedes are very special critters. They have unusual and interesting defense mechanisms that keep them safe from predators.
Teacher directions: This model shows revisions to be made during the modeling in Work Times A and C. Changes in green indicate revisions for supporting details, and changes in red indicate revisions for word choice.

The millipede is a relative of the centipede. They have twenty to one hundred body segments, and too pairs of legs on each segment. Millipedes like to be in damp areas. In the wild, they live on moist forest floors. Some millipedes live in our houses! They like to live in bathrooms and basements because they’re damp. Millipedes aren’t fast. They roll into balls and eat leaves or decaying vegetation. Their main predators, or animals that hunt and eat the millipede, are ants, toads, and mice. To protect themselves from predators, millipedes have two main defense mechanisms. When they’re near a predator, they might roll into a ball or ooze poison.

When a predator is nearby, millipedes often roll into a ball. Because they have so many body segments, it’s easy for them to bend and roll into a tight ball. They have hard exoskeletons, which means that their skeletons are on the outside of their bodies; this makes the ball hard too. That protects the millipede’s body. The ball hides the millipede from predators because it doesn’t look like a millipede anymore! A toad looking for lunch might easily mistake a tiny rolled up millipede for a pebble and pass it by! This is a very useful defense mechanism.
Some millipedes use emit poison to protect themselves. They do this when the predator threatens or touches them. Some poison is sticky. When the poison gets on the predator, it slows the predator down which gives the slow millipede time to escape. Another poison is gas, and can be very strong. Some gas is so strong that it can paralyze or kill the predator. Some millipedes have poison that smells, and when predators smell it they run away. Sometimes, other animals rub millipedes all over their bodies to use the poison to repel insects. The millipedes don’t often use their poison, though. They would rather not be attacked in the first place! Millipedes are very special critters. They have unusual and interesting defense mechanisms that keep them safe from predators.
Teacher directions: Write the following on chart paper to create this anchor chart.

Steps for Revising My Writing

– Choose the correct colored pencil. Today’s color is_____.

– Decide where you are going to add a revision note based on feedback or new learning.

– Write your revision note in the space above the sentence you want to change.

– Read through your entire informative piece and continue to record your revision notes.

– Review your revision notes to be sure they make sense.
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

With support from peers and adults, I can use the writing process to produce clear and coherent writing. (W.4.5)

- I can correctly use homophones (e.g., to, too, two; there, their). (L.4.1g)
- I can use correct capitalization in my writing. (L.4.2a)
- I can spell grade-appropriate words correctly. (L.4.2d)
- I can use resources to check and correct my spelling. (L.4.2d)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
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<tr>
<td>• I can check my peers’ work for correct capitalization.</td>
<td>• Edits of informative piece</td>
</tr>
<tr>
<td>• I can check my peers’ work for correct spelling.</td>
<td></td>
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</table>

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**Agenda**

1. **Opening**
   - A. Engaging the Writer: Whip-around (5 minutes)
   - B. Reviewing Learning Targets (5 minutes)
2. **Work Time**
   - A. Guided Practice: Editing for Conventions (15 minutes)
   - B. Guided Practice: Editing for Homophones (10 minutes)
   - C. Editing Stations (20 minutes)
3. **Closing and Assessment**
   - A. Debrief (5 minutes)
4. **Homework**
   - A. Continue reading your independent reading book for this unit.

<table>
<thead>
<tr>
<th>Teaching Notes</th>
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<tbody>
<tr>
<td>• This lesson focuses on helping students edit their informative piece drafts for conventions. In particular, they focus on spelling, capitalization, and homophones.</td>
</tr>
<tr>
<td>• Before students complete edits on their own drafts, the teacher guides them through the process. To do this, two editing stations are created: one for spelling and one for capitalization. As in previous lessons, the teacher models how to make edits based on the Millipede Informative Piece Draft. (Note that the Millipede Informative Piece Draft with Revisions in the supporting materials provides example revisions.) Then, students are released to visit the editing stations and work with a partner to improve their drafts.</td>
</tr>
<tr>
<td>• Students are also guided through a mini lesson on homophones and work with a partner to create example sentences using homophones.</td>
</tr>
<tr>
<td>• At the end of the lesson, collect students’ most recent informative piece drafts, with their revisions from Lesson 10 and edits from this lesson. Students will publish their informative pieces in Lesson 2 of Unit 3; use the time in between this lesson and Unit 3, Lesson 2 to read and give feedback to students on their writing.</td>
</tr>
<tr>
<td>• If your district has printed lessons for you in black and white, it may be helpful to view this lesson in color. Go to EngageNY.org or commoncoresuccess.elschools.org and search for 4th grade, Module 2B, Unit 2 lessons.</td>
</tr>
<tr>
<td>• In advance:</td>
</tr>
<tr>
<td>– Set up editing stations. Ideally these stations will have enough room for about half of your class to sit. Students should be able to see the Spelling Conventions and Capitalization Conventions anchor charts, have access to colored pencils (designate one color for spelling mistakes and one color for capitalization mistakes and place these at the appropriate stations) and have a surface to write on (table/desks or clipboards).</td>
</tr>
<tr>
<td>– Review the Millipede Informative Piece Draft and make changes if necessary, based on the needs of your class.</td>
</tr>
<tr>
<td>• Post: Spelling Conventions and Capitalization Conventions anchor charts; learning targets.</td>
</tr>
</tbody>
</table>
Lesson Vocabulary | Materials
--- | ---
spelling, homophone, capitalization, publish | Spelling Conventions anchor chart (new; co-created with students during Work Time A)
 | Capitalization Conventions anchor chart (new; co-created with students during Work Time A)
 | Millipede Informative Piece Draft (one for display)
 | Millipede Informative Piece Draft with Revisions (for teacher reference)
 | Colored pencils (one of each color per student)
 | Common Affixes handout (from Unit 1, Lesson 12; one per student and one to display)
 | Informative piece drafts (one per student)

Opening

A. Engaging the Writer: Whip-around (5 minutes)
- Review the Whip-around protocol with students. Using this protocol, ask:
  * “What is one supporting detail or word choice revision you are proud of from the last lesson?”
- Validate student responses and summarize what they were proud of. This may sound something like:
  * “Great revisions! I heard several of you say that you added the definition of the word predator to your writing.”

B. Reviewing Learning Targets (5 minutes)
- Remind students that they have been working through the writing process to write an informational text. Ask them which parts of the writing process they have completed so far.
- Listen for them to share that they have planned, drafted, and revised their pieces.
- Direct students’ attention to the learning targets and read them aloud:
  * “I can check my peers’ work for correct capitalization.”
  * “I can check my peers’ work for correct spelling.”
- Tell students that today they will move to the editing stage of the writing process and will edit their informative pieces for the conventions listed in the supporting targets. Circle the key words: spelling and capitalization. Clarify the meanings of these words or targets as needed.
## Work Time

**A. Guided Practice: Editing for Conventions (15 minutes)**

- Point out the two editing stations. Read the **Spelling Conventions anchor chart** at the first station:
  * “How can I make sure my SPELLING is correct?”
- Cold call students to share out their responses to question on the Spelling Conventions anchor chart and record their responses on the anchor chart.
- Circle or add important tips for this question. Be sure these are on the chart: breaking down words using prefixes and suffixes, checking the research journal glossaries or research texts, and thinking about whether the word is a common *homophone*. Explain that you will discuss homophones in more depth later in the lesson.
- Repeat this process for capitalization, asking the question:
  * “How do I know if my CAPITALIZATION is correct?”
- Be sure to note that students’ expert group animal is not a proper noun and should not be capitalized. Record student responses on the **Capitalization Conventions anchor chart**.
- Tell students that they will use these conventions anchor charts later in the lesson.
- Display the **Millipede Informative Piece Draft**. Use the first few sentences of the draft to model, referring to the **Millipede Informative Piece Draft with Revisions (for teacher reference)** as needed. Demonstrate how to edit for each convention by circling or underlining with the correct *colored pencil* (see Teaching Notes). Be sure to model referring to the Spelling Conventions and Capitalization Conventions anchor charts posted at each editing station as resources, and be sure to model spelling mistakes in affixes and homophones.
- For example: Read aloud the Millipede Informative Piece Draft. Notice a mistake and think aloud by saying something like:
  * “I notice that one of the rules for capitalization is to be sure the first word of each sentence is capitalized.”
- Then, demonstrate fixing a mistake. Say:
  * “I see that I did not do this when I wrote the second sentence, so I am going to circle it with a colored pencil from this station.”

## Meeting Students’ Needs

- Anchor charts provide a visual cue to students about what to do when you ask them to work independently. They also serve as note-catchers when the class is co-constructing ideas.
## Work Time (continued)

- Continue modeling, and reading aloud the Millipede Informative Piece Draft. Notice another mistake and think aloud by saying something like:
  * “I notice that one hint is to think about if the word has any common prefixes or suffixes.”

- Then, demonstrate fixing the mistake. Say:
  * “I’m not sure if I spelled the word ‘decaying’ right in this sentence in the first paragraph: ‘They roll into balls and eat leaves or decaying vegetation.’ I think it ends with a suffix. I’m going to look at my Common Affixes handout from Unit 1, Lesson 12 and check to see if there’s a suffix on here that I hear in the word ‘decaying.’ On that handout, I see the suffix –ing! That’s how the word ‘decaying’ ends. I’ll circle ‘decaying’ on my draft with a colored pencil from this station and write ‘-ing’ above it.”

- Address any clarifying questions.

## Meeting Students’ Needs

### B. Guided Practice: Editing for Homophones (10 minutes)

- Explain that homophones are words that sound the same but have different meanings and usually different spellings.
- Ask students to brainstorm some common homophones and ask for volunteers to share out.
- Record their responses on the Spelling Conventions anchor chart by that bullet point. Record homophones such as:
  - two, to, too
  - they’re, their, there
  - ant, aunt
  - ate, eight
  - be, bee
  - dear, deer
  - for, four, fore
  - heard, herd
  - its, it’s
  - tail, tale
  - your, you’re
**Work Time (continued)**

- Choose one of the common homophones suggested by students and invite them to work with a partner to write two sentences. Explain that each sentence should include one of the homophones. Provide an example if necessary.

- Give them 2 minutes to work and then use equity sticks to call on students to share their sentences whole class. An example might be: “The ant climbed up the log” and “My aunt visited for dinner last night.”

- Next, ask students to rewrite their sentences, replacing the correct homophone with the incorrect homophone.

- Ask students to read their sentences aloud to their partner and discuss how the meaning of their sentences changed.

- Give them 2 minutes and then use equity sticks to call on students to share their new sentences whole class, and how the meaning of their sentences changed. Listen for responses like: “My new sentence is: The aunt climbed up the log. The meaning changed because in my original sentence, it meant an insect climbed up a log but in the new sentence, it meant a person climbed up a log.”

- Ask:
  - “Why is it important to be sure to use the correct homophone in our writing?”

- Listen for responses like: “so our reader is not confused” or “so our writing is accurate.”

- Model revising a spelling mistake for a homophone in the Millipede Informative Piece Draft. Notice a mistake and think aloud by saying something like:
  - “I notice that one hint is to think about if the word is a homophone.”

- Then, demonstrate fixing a mistake. Say:
  - “I know that two, to, and too are homophones, and I see that I used ‘too’ in this sentence in the first paragraph: ‘They have twenty to one hundred body segments, and too pairs of legs on each segment.’ I’m going to think about what ‘too’ means and if I used the right spelling here. In my writing, I mean the number two, but I know that ‘too’ means ‘also.’ So I need to fix the spelling of that word. I’ll circle it on my draft with a colored pencil from this station and write ‘two’ above it.”

- Address any clarifying questions.
### Work Time (continued)

**C. Editing Stations (20 minutes)**
- Tell students that they are going to go to both editing stations to get help from peers to improve their informative piece drafts. Give directions:
  1. Count off or choose one station to begin work.
  2. Take your **informative piece draft** with you to your first station.
  3. At that station, trade papers with a partner.
  4. Read your partner’s draft (with revisions for supporting details and vocabulary from Lesson 10) and identify any convention mistakes related to the topic at that station’s chart.
  5. When both partners are finished, move to the next station.
  6. Be sure to get to both stations.
- **Meeting Students’ Needs**
  - In addition to the Conventions anchor charts, a conventions checklist can be prepared beforehand to support ELLs or students with special needs during editing.
  - Consider several options if students need more structured management of movement. Partners can raise their hands when they are done at a given station and check with you before they move on. Or students can remain in one place and all materials can be available where they are working.

### Meeting Students’ Needs

- In addition to the Conventions anchor charts, a conventions checklist can be prepared beforehand to support ELLs or students with special needs during editing.
- Consider several options if students need more structured management of movement. Partners can raise their hands when they are done at a given station and check with you before they move on. Or students can remain in one place and all materials can be available where they are working.

- At the end of the lesson, collect students’ most recent informative piece drafts.
### Closing and Assessment

**A. Debrief (5 minutes)**
- Gather students whole group.
- Redirect their attention to the learning targets and read them aloud.
- Tell students that they have learned a lot over the last couple weeks about researching and writing informational texts by writing an informational page about their expert group animal. Tell them that in the next lesson, they will be assessed on the focus question listed at the top of their Informative Page Planning graphic organizer: “How does my expert group animal use its body and behaviors to help it survive?” To do this, they will do an on-demand assessment in which they write another informational piece about animal defense mechanisms for a different animal.
- Assure them that they are ready for this “on my own” assessment. They have just finished their informational pages about their expert group animals and now should be experts on this genre of writing.

### Meeting Students’ Needs

- Developing self-assessment and reflection supports all learners, but research shows it supports struggling learners most.

### Homework

- Continue reading your independent reading book for this unit.
Teacher directions: This model is to be used during Work Time A; there are conventions mistakes in it intentionally that are used to model editing. The model following this draft shows edits to be made during the modeling in Work Time A.

The millipede is a relative of the centipede. They have twenty to one hundred body segments, and too pairs of legs on each segment. Millipedes like to be in damp areas. In the wild, they live on moist forest floors. Some millipedes live in our houses! They like to live in bathrooms and basements because they’re damp. Millipedes aren’t fast. They roll into balls and eat leaves or decaying vegetation. Their main predators, or animals that hunt and eat the millipede, are ants, toads, and mice. To protect themselves from predators, millipedes have two main defense mechanisms. When they’re near a predator, they might roll into a ball or ooze poison.

When a predator is nearby, millipedes often roll into a ball. Because they have so many body segments, it’s easy for them to bend and roll into a tight ball. They have hard exoskeletons, which means that their skeletons are on the outside of their bodies; this makes the ball hard too. That protects the millipede’s body. The ball hides the millipede from predators because it doesn’t look like a millipede anymore! A toad looking for lunch might easily mistake a tiny rolled up millipede for a pebble and pass it by! This is a very useful defense mechanism.
Some millipedes **use emit** poison to protect themselves. They do this when the predator **threatens or** touches them. Some poison is sticky. When the poison gets on the predator, it slows the predator down **which gives the slow millipede time to escape**. Another poison is gas, and can be very strong. Some gas is so strong that it can paralyze or kill the predator. **Some millipedes have poison that smells, and when predators smell it they run away.** Sometimes, other animals rub millipedes all over their bodies to use the poison to repel insects. The millipedes don’t often use their poison, though. They would rather not be attacked in the first place! Millipedes are very special critters. They have unusual and interesting defense mechanisms that keep them safe from predators.
Teacher directions: This model shows edits to be made during the modeling in Work Time A. Changes in blue indicate edits for capitalization, and changes in purple indicate edits for spelling.

The millipede is a relative of the centipede. They have twenty to one hundred body segments, and two pairs of legs on each segment. Millipedes like to be in damp areas. In the wild, they live on moist forest floors. Some millipedes live in our houses! They like to live in bathrooms and basements because they’re damp. Millipedes aren’t fast. They roll into balls and eat leaves or decaying vegetation. Their main predators, or animals that hunt and eat the millipede, are ants, toads, and mice. To protect themselves from predators, millipedes have two main defense mechanisms. When they’re near a predator, they might roll into a ball or ooze poison.

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Grade 4: Module 2B: Unit 2: Lesson 12

End of Unit 2 Assessment: Writing an Informative Text about Pufferfish Defense Mechanisms
Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can accurately synthesize information from two texts on the same topic. (RI.4.9)
I can write informative/explanatory texts that convey ideas and information clearly. (W.4.2)
I can produce writing that is appropriate to task, purpose, and audience. (W.4.4)
I can conduct a research project to become knowledgeable about a topic. (W.4.7)
I can document what I learn about a topic by taking notes. (W.4.8)
I can sort my notes into categories. (W.4.8)

Supporting Learning Target | Ongoing Assessment
--- | ---
• I can synthesize information from my research notes onto a planning graphic organizer. | • End of Unit 2 Assessment
• I can group together facts from my research with related evidence in my informative piece. | • Tracking My Progress, End of Unit 2 recording form
• I can plan and write a draft of an informative piece describing the pufferfish and its defense mechanisms.
# End of Unit Assessment: Writing an Informative Text about Pufferfish Defense Mechanisms

## Agenda

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<td>A. Reviewing Learning Targets (5 minutes)</td>
<td>A. Reviewing Learning Targets (5 minutes)</td>
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<tr>
<td>Work Time</td>
<td>2. Work Time</td>
</tr>
<tr>
<td>A. End of Unit 2 Assessment: Writing an Informative Text about Pufferfish Defense Mechanisms (50 minutes)</td>
<td>A. End of Unit 2 Assessment: Writing an Informative Text about Pufferfish Defense Mechanisms (50 minutes)</td>
</tr>
<tr>
<td>Closing and Assessment</td>
<td>3. Closing and Assessment</td>
</tr>
<tr>
<td>Homework</td>
<td>4. Homework</td>
</tr>
<tr>
<td>A. Continue reading your independent reading book for this unit</td>
<td>A. Continue reading your independent reading book for this unit</td>
</tr>
</tbody>
</table>

## Teaching Notes

- Students complete the End of Unit 2 Assessment during this lesson. For this assessment, they plan and write an informative piece about the pufferfish. They will use the texts read for the Mid-Unit 2 Assessment as well as the notes taken during that assessment. Since students are already familiar with the texts, a large part of their focus can rest on planning and writing. With this added emphasis on writing time, it’s possible that your assessment of students’ progress toward mastering the Writing Standards addressed by this assessment will be more accurate.
- If students receive accommodations for assessments, communicate with the cooperating service providers regarding the practices of instruction in use during this study as well as the goals of the assessment.
- For some students, this assessment may require more than the 50 minutes allotted. Consider providing time over multiple days if necessary.
- After the End of Unit 2 Assessment, students reflect on the learning targets on the Tracking My Progress, End of Unit 2 recording form. This exercise is meant to provide them with time to formally keep track of and reflect on their own learning.
- In advance: Gather students’ Mid-Unit 2 Assessments and notes.
- Post: Guiding Questions anchor chart; learning targets.

## Lesson Vocabulary

<table>
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<tr>
<td>Do not preview vocabulary for this assessment lesson.</td>
</tr>
<tr>
<td>• Guiding Questions anchor chart (begun in Unit 1, Lesson 1)</td>
</tr>
<tr>
<td>• Equity sticks</td>
</tr>
<tr>
<td>• End of Unit 2 Assessment: Writing an Informative Text about Pufferfish Defense Mechanisms (one per student)</td>
</tr>
<tr>
<td>• Mid-Unit 2 Assessment texts and research notes (students’ copies; from Lesson 6)</td>
</tr>
<tr>
<td>• End of Unit 2 Assessment: Writing an Informative Text about Pufferfish Defense Mechanisms (answers, for teacher reference)</td>
</tr>
<tr>
<td>• Tracking My Progress, End of Unit 2 recording form (one per student)</td>
</tr>
</tbody>
</table>

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GRADE 4: MODULE 2B: UNIT 2: LESSON 12
End of Unit Assessment:
Writing an Informative Text about Pufferfish Defense Mechanisms

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</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Reviewing Learning Targets (5 minutes)</strong></td>
<td>• Discussing and clarifying the language of learning targets helps build academic vocabulary.</td>
</tr>
<tr>
<td>• Display the <strong>Guiding Questions anchor chart</strong>. Use <strong>equity sticks</strong> to call on a student to read the questions aloud:</td>
<td></td>
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<tr>
<td>* “How do animals’ bodies and behaviors help them survive?”</td>
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<tr>
<td>* “How can a writer use knowledge from their research to inform and entertain?”</td>
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<tr>
<td>• Tell students that today they will complete a formal assessment in which they will do on their own much of what they have been practicing, to demonstrate whether they are able to:</td>
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<tr>
<td>– Synthesize information from informational texts.</td>
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<tr>
<td>– Plan for and write an introduction paragraph, including a focus statement, about an animal.</td>
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<tr>
<td>– Plan for and write body paragraphs, including a conclusion statement, about that animal’s defense mechanisms.</td>
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<tr>
<td>– Revise and edit the writing.</td>
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<td>• Remind them that they will need to refer to the text to respond to the prompt thoroughly. Encourage students to do their best. Let them know that this is a chance to show what they know and how much effort they are making to read carefully and identify important details in an informational text. This also is an opportunity to discover even more about animal defense mechanisms.</td>
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<tr>
<td>• Direct students’ attention to the learning targets and ask them to read the targets silently to themselves:</td>
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<tr>
<td>* “I can synthesize information from my research notes onto a planning graphic organizer.”</td>
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</tr>
<tr>
<td>* “I can group together facts from my research with related evidence in my informative piece.”</td>
<td></td>
</tr>
<tr>
<td>* “I can plan and write a draft of an informative piece describing the pufferfish and its defense mechanisms.”</td>
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<tr>
<td>• Have students give a thumbs-up if they are clear on what they will be expected to do, a thumbs-sideways if they understand part but not all of what to do, and a thumbs-down if they are very unsure about what they should do. Address any clarifying questions before beginning the assessment.</td>
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</tbody>
</table>
A. End of Unit 2 Assessment: Writing an Informative Text about Pufferfish Defense Mechanisms (50 minutes)

- Distribute the End of Unit 2 Assessment: Writing an Informative Text about Pufferfish Defense Mechanisms and Mid-Unit 2 Assessment texts and research notes.
- Tell students that they will use the texts read for the Mid-Unit 2 Assessment and their notes taken during that assessment on today’s end of unit assessment.
- While students are taking the assessment, circulate to monitor their test-taking skills. Prompt them throughout the assessment, letting them know how much time they have left and encouraging them to continue working. This is an opportunity to analyze students’ behaviors while taking an assessment. Document strategies students are using during the assessment. For example, look for those who are annotating their text, using their graphic organizers to plan and revise their writing, and referring to the text as they respond to the prompt.

<table>
<thead>
<tr>
<th>Work Time</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. End of Unit 2 Assessment: Writing an Informative Text about Pufferfish Defense Mechanisms (50 minutes)</strong></td>
<td>• If students receive accommodations for assessments, communicate with the cooperating service providers regarding the practices of instruction in use during this study as well as the goals of the assessment.</td>
</tr>
<tr>
<td>• Distribute the End of Unit 2 Assessment: Writing an Informative Text about Pufferfish Defense Mechanisms and Mid-Unit 2 Assessment texts and research notes.</td>
<td>• For some students, this assessment may require more than the 50 minutes allotted. Consider providing time over multiple days if necessary.</td>
</tr>
<tr>
<td>• Tell students that they will use the texts read for the Mid-Unit 2 Assessment and their notes taken during that assessment on today’s end of unit assessment.</td>
<td></td>
</tr>
<tr>
<td>• While students are taking the assessment, circulate to monitor their test-taking skills. Prompt them throughout the assessment, letting them know how much time they have left and encouraging them to continue working. This is an opportunity to analyze students’ behaviors while taking an assessment. Document strategies students are using during the assessment. For example, look for those who are annotating their text, using their graphic organizers to plan and revise their writing, and referring to the text as they respond to the prompt.</td>
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</tr>
</tbody>
</table>
## Closing and Assessment

### A. Reflecting on Learning Targets—Tracking My Progress (5 minutes)

- Congratulate students on their hard work on the end of unit assessment.
- Distribute the **Tracking My Progress, End of Unit 2 recording form**.
- Remind students that successful learners keep track and reflect on their own learning. Point out that they have been doing this informally all year during debriefs, when they consider how well they are progressing toward the learning targets.
- Review Step 1 in the self-assessment and remind students that this is where you would like them to explain what the target means to them. For example, the first target uses the phrase “synthesize information from my research notes.” They should write what this means in their own words, by explaining what it means to synthesize and how it is done.
- Point out the second step and explain that this is similar to the thumbs-up, -sideways, or -down that they have used in previous lessons. They should also explain why they think they “need more help,” “understand some,” or are “on the way,” and give examples. Consider giving students an example such as: “I circled that I need understand some because I don’t think I use enough facts from my research.”
- Collect students’ Track My Progress, End of Unit 2 recording forms to use as a formative assessment to guide instructional decisions during Unit 3.

### Meeting Students’ Needs

- Developing self-assessment and reflection supports all students, but research shows it supports struggling learners the most.

## Homework

- Continue reading your independent reading book for this unit.
End of Unit 2 Assessment:
Writing an Informative Text about Pufferfish Defense Mechanisms

Part 1 directions:
1.) Read the prompt below.
2.) Using the texts and your research notes from the Mid-Unit 2 Assessment, plan an informative written piece for the prompt. *(RI.4.9, W.4.2, W.4.4, W.4.7)*

Prompt:
Review your research from the Mid-Unit 2 Assessment about the pufferfish’s defense mechanisms. Then, use the evidence you have gathered to write an informative piece that describes two defense mechanisms of the pufferfish. Be sure to do the following in your piece:

- Introduce the pufferfish, including a focus statement that states the main idea of the piece. *(W.4.2a)*
- Use paragraphs to group related facts and evidence. *(W.4.2a)*
- Use facts and details to describe two of the pufferfish’s defense mechanisms. *(W.4.2b, W.4.8)*
- Use precise vocabulary to inform about the pufferfish. *(W.4.2d)*
- Provide a concluding statement that restates the focus statement. *(W.4.2e)*
- Synthesize information from at least two research sources. *(RI.4.9, W.4.7, W.4.8)*
- Use vocabulary from your research on animal defense mechanisms to accurate descriptions throughout the piece. *(W.4.2d, L.4.3a, L.4.6)*
- Use correct capitalization and spell fourth-grade words correctly.

Use the following planning graphic organizer to plan your informative piece before writing your draft.
Focus Question: How does the pufferfish use its body and behaviors to help it survive?

Focus Statement: Name: 

Date:

<table>
<thead>
<tr>
<th>Introduction Paragraph</th>
<th>Detail Paragraph 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the pufferfish.</td>
<td>Describe one defense mechanism the pufferfish uses.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Detail Paragraph 2</th>
<th>Concluding Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe one defense mechanism the pufferfish uses.</td>
<td>Restate your focus statement.</td>
</tr>
</tbody>
</table>

My Sources: List any sources you used in planning your informative piece.

Vocabulary from my research to be used:
Informative Page Planning Graphic Organizer

**Part 2 directions:** Write your informative piece on a separate sheet of lined paper.

**Part 3 directions:** Reread your informative piece and make any needed revisions or edits based on the directions in Part 1.
Part 1 directions:

1. Read the prompt below.
2. Using the texts and your research notes from the Mid-Unit 2 Assessment, plan an informative written piece for the prompt. *(RI.4.9, W.4.2, W.4.4, W.4.7)*

Prompt:
Review your research from the Mid-Unit 2 Assessment about the pufferfish’s defense mechanisms. Then, use the evidence you have gathered to write an informative piece that describes two defense mechanisms of the pufferfish. Be sure to do the following in your piece:

- Introduce the pufferfish, including a focus statement that states the main idea of the piece. *(W.4.2a)*
- Use paragraphs to group related facts and evidence. *(W.4.2a)*
- Use facts and details to describe two of the pufferfish’s defense mechanisms. *(W.4.2b, W.4.8)*
- Use precise vocabulary to inform about the pufferfish. *(W.4.2d)*
- Provide a concluding statement that restates the focus statement. *(W.4.2e)*
- Synthesize information from at least two research sources. *(RI.4.9, W.4.7, W.4.8)*
- Use vocabulary from your research on animal defense mechanisms to accurate descriptions throughout the piece. *(W.4.2d, L.4.3a, L.4.6)*
- Use correct capitalization and spell fourth-grade words correctly.

Use the following planning graphic organizer to plan your informative piece before writing your draft.
**Focus Question:** How does the pufferfish use its body and behaviors to help it survive?

**Focus Statement:**
The pufferfish protects itself in several ways.

---

### Introduction Paragraph
Describe the pufferfish.
- round body
- small fins
- spines all over its body
- lives in coral reefs in warm, tropical oceans
- predator: tiger shark or barracuda

### Detail Paragraph 1
Describe one defense mechanism the pufferfish uses.
- inflates its body when a predator comes near or eats it
- inflates to three times its normal size
- swallows water until its stomach is completely full
- skin and stomach are stretchy and it doesn’t have a rib cage, which allows the fish to inflate
- can kill its predator if it inflates in the predator’s throat
- becomes too large for an enemy to swallow

### Detail Paragraph 2
Describe one defense mechanism the pufferfish uses.
- It threatens its predator with spines.
- The spines are prickly.
- When it's inflated, the spines make the pufferfish look intimidating and scares the predator away.
- The spines hurt the predator when it tries to eat the pufferfish.

### Concluding Statement
Restate your focus statement.
The pufferfish protects itself with its prickly spines and by inflating.

---

**My Sources:** List any sources you used in planning your informative piece.
“Award-Winning Survival Skills”
“All Puffed Up”

**Vocabulary from my research to be used:**
inflate
spines
prickly
**Part 2 directions:** Write your informative piece on a separate sheet of lined paper.

The round, spiny pufferfish uses its small fins to swim in the coral reef of a warm, tropical ocean. Its main predators, the tiger shark and the barracuda, think it’s a harmless and easy prey. But the pufferfish protects itself in several ways.

The pufferfish’s main defense mechanism is inflating its body when a predator comes near or tries to eat it. It can inflate to three times its normal size. It inflates by swallowing water until its stretchy stomach is completely full. Since it doesn’t have a rib cage, the pufferfish can inflate easily. The pufferfish can kill its predator if it inflates in the predator’s throat. If it inflates before the predator catches it, it is too big for the enemy to swallow.

Another way the pufferfish protects itself is by threatening its predator with its prickly spines. When it’s inflated, the spines make the pufferfish look intimidating and scare the predator away. The spines also hurt the predator if it tries to eat the puffer. The pufferfish protests itself with its prickly spines and by inflating.

**Part 3 directions:** Reread your informative piece and make any needed revisions or edits based on the directions in Part 1.

Look for students to have revised their work for details that are scientifically accurate and develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic, as well as revising for word choice.

Look for students to have edited their work for appropriate spelling and capitalization.
Learning target: I can synthesize information from my research notes onto a planning graphic organizer.

1. The target in my own words is:

2. How am I doing? Circle one.

I need more help to learn this

I understand some of this

I am on my way!

3. The evidence to support my self-assessment is:

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________
**Learning target:** I can group together facts from my research with related evidence in my informative piece.

1. The target in my own words is:

2. How am I doing? Circle one.

   - I need more help to learn this
   - I understand some of this
   - I am on my way!

3. The evidence to support my self-assessment is:
Tracking My Progress, End of Unit 2

Learning target: I can plan and write a draft of an informative piece describing an animal and its defense mechanisms.

1. The target in my own words is:

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

2. How am I doing? Circle one.

I need more help to learn this                                           I understand some of this                                           I am on my way!

3. The evidence to support my self-assessment is:

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
Unit 3: Using Writing to Entertain

In this unit, students apply the research they have completed (in Unit 2) about their expert animal and its defense mechanisms in order to write a narrative about their animal. Students will write a choose-your-own-adventure narrative about their animal for their performance task for this module. Throughout the unit students work on their narratives by writing the introduction and first choice ending. Then as an on demand end of unit assessment, they write the second choice ending for their narratives. Finally, they combine these choices to complete their performance task and publish their choose-your-own-adventure narratives. Students begin this unit by reading a mentor literary text, Can You Survive in the Wilderness as a class. This text introduces them to the format of a choose-your-own-adventure. Students hone their writing skills through practicing with a class model based on the millipede. For the mid-unit assessment, students will plan for and draft the introduction to their own narratives. Then through mini-lessons and peer critique continue to revise their writing. Finally, in the end of unit assessment, students write the second choice ending of their narrative, on demand, and then combine this with their first choice ending to create their final performance task in a choose-your-own-adventure format.

Guiding Questions And Big Ideas

- How do animals’ bodies and behaviors help them survive?
- How can a writer use knowledge from their research to inform and entertain?
- To protect themselves from predators, animals use different defense mechanisms.
- In order to entertain and inform, writers must become researchers.

Mid-Unit 3 Assessment

Planning for and Drafting a Narrative Introduction
This assessment centers on NYSP12 ELA CCLS W.4.3a and d, and W.4.4. Students will write a first draft beginning to their choose-your-own-adventure narrative. Students will use their narrative graphic organizers to write a beginning that establishes their narrative by introducing their character, setting, and coming events of their story. Students’ use of sensory details and of facts and details from their research will also be assessed.

End of Unit 3 Assessment

Writing Choice 2 of the Choose-Your-Own-Adventure Narrative
This assessment centers on NYSP12 ELA CCLS W.4.3b, c, d, e, W.4.2a, and W.4.4. Students will write the Choice #2 narrative of their choose-your-own-adventure narrative. In this piece, students will feature another defense mechanism of their animal based on their research.
Content Connections

This module is designed to address English Language Arts standards as students read informational texts about animal defense mechanisms. However, the module intentionally incorporates Science Practices and Themes to support potential interdisciplinary connections to this compelling content. These intentional connections are described below.

**Big ideas and guiding questions are informed by the New York State Common Core K–8 Science Framework:**

- Next-Generation Science Standards 4L-S1-1
- From Molecules to Organisms: Structure and Processes

NYS Science Standard 4: Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
- Key Idea 2: Organisms inherit genetic information in a variety of ways that result in continuity of structure and function between parents and offspring.
- Key Idea 5: Organisms maintain a dynamic equilibrium that sustains life.
- Key Idea 6: Plants and animals depend on each other and their physical environment.

<table>
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<tr>
<th>Texts</th>
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This unit is approximately 3 weeks or 14 sessions of instruction.

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Lesson Title</th>
<th>Long-Term Targets</th>
<th>Supporting Targets</th>
<th>Ongoing Assessment</th>
<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td>Preparing to Write: Determining Characteristics of the Format</td>
<td>• I can write for a variety of reasons. (W.4.10)</td>
<td>• I can determine the characteristics of a “choose-your-own-adventure” by analyzing an example.</td>
<td>• Participation in creation of Choose-Your-Own-Adventure anchor chart</td>
<td>• Guiding Questions anchor chart</td>
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<td></td>
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<td>• I can write narrative text about real or imagined experiences or events. (W.4.3)</td>
<td></td>
<td>• Performance Task anchor chart</td>
<td>• Choose-Your-Own-Adventure anchor chart</td>
</tr>
<tr>
<td>Lesson 2</td>
<td>Setting a Purpose for Writing: Understanding the Performance Task and Getting Started</td>
<td>• I can write informative texts that convey ideas and information clearly. (W.4.2)</td>
<td>• I can prepare a final copy of my informative page for my choose-your-own-adventure animal defense narrative.</td>
<td>• Students’ informative pages</td>
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<td></td>
<td></td>
<td>• I can use grammar conventions to send a clear message to a reader or listener. (L.4.1, L.4.2)</td>
<td>• I can collaborate with my peers to write an About Your Adventure page for my choose-your-own-adventure animal defense narrative.</td>
<td>• Participation in shared writing of About Your Adventure page</td>
<td>• About Your Adventure Page anchor chart</td>
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<td></td>
<td></td>
<td>• I can express ideas using carefully chosen words. (L.4.3)</td>
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<td>• Performance Task anchor chart</td>
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<tr>
<td>Lesson 3</td>
<td>Planning Ideas: Developing a Character Profile</td>
<td>• I can write narrative text about real or imagined experiences or events. (W.4.3)</td>
<td>• I can listen as my peers share their writing and give specific praise for their work.</td>
<td>• Informative page (from homework)</td>
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<td>• I can introduce the narrator and/or characters of my narrative. (W.4.3a)</td>
<td>• I can synthesize information to develop an accurate character profile supported by research.</td>
<td>• Character Profile graphic organizer</td>
<td>• Author’s Chair Celebration anchor chart</td>
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<td>• Choose-Your-Own-Adventure anchor chart</td>
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<tr>
<td>Lesson 4</td>
<td>Planning Ideas: Developing a Plot for the Millipede-Your-Own-Adventure Narrative</td>
<td>• I can establish a situation. (W.4.3a)</td>
<td>• I can determine the characteristics of a narrative.</td>
<td>• Analyzing a Narrative note-catcher</td>
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<td>• I can develop the topic with facts, definitions, details, and quotations. (W.4.2b)</td>
<td>• I can organize a plot for a narrative using events based on research of my animal and its defense mechanisms.</td>
<td>• Millipede Narrative Planning graphic organizer</td>
<td>• Characteristics of Narratives anchor chart</td>
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<td>• Performance Task anchor chart</td>
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<td>• Steps for Planning and Drafting My Narrative anchor chart</td>
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<tr>
<td>Lesson</td>
<td>Lesson Title</td>
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<td>Anchor Charts &amp; Protocols</td>
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</table>
| Lesson 5 | Planning Ideas: Expert Group Animal Plot Development | • I can establish a situation. (W.4.3a)  
• I can develop the topic with facts, definitions, details, and quotations. (W.4.2b) | • I can organize a plot for a narrative using events based on research of my animal and its defense mechanisms.  
• I can give kind, helpful, and specific feedback to my critique partner.  
• I can critique the ideas of my writing partner’s Narrative Planning graphic organizer for the characteristics of a narrative. This means I can look for a plan for the characters, setting, introduction, rising action, problem, solution, and conclusion. | • Narrative Planning graphic organizer | • Characteristics of Narratives anchor chart  
• Performance Task anchor chart  
• Steps for Planning and Drafting My Narrative anchor chart  
• Critique Protocol anchor chart |
| Lesson 6 | Planning Organization: Expanding the Introduction | • I can write narrative text about real or imagined experiences or events. (W.4.3)  
• I can organize events in an order that makes sense in my narrative (W.4.3a)  
• I can introduce the narrator and/or characters of my narrative. (W.4.3a) | • I can plan and draft a compelling introduction that establishes a situation by introducing the characters, setting, and plot of my narrative. | • Millipede Introduction Expansion graphic organizer  
• Millipede Introduction draft | • Characteristics of Narratives anchor chart  
• Steps for Planning and Drafting My Narrative anchor chart |
| Lesson 7 | Mid-Unit Assessment: Planning for and Drafting a Narrative Introduction | • I can establish a situation. (W.4.3a)  
• I can introduce the narrator and/or characters of my narrative. (W.4.3a) | • I can plan and draft a compelling introduction that establishes a situation by introducing the characters, setting, and plot of my narrative. | • Mid-Unit 3 Assessment: Planning for and Drafting a Narrative Introduction  
• Tracking My Progress, Mid-Unit 3 recording form | • Characteristics of Narratives anchor chart  
• Performance Task anchor chart  
• Steps for Planning and Drafting My Narrative anchor chart  
• Popcorn Read protocol |
## Lesson 8
**Peer Critique for Organization and Style**
- I can use the writing process to produce clear and coherent writing (with support). (W.4.5)
- I can effectively participate in a conversation with my peers and adults. (SL.4.1)
- I can use dialogue and descriptions to show the actions, thoughts, and feelings of my characters. (W.4.3b)

**Long-Term Targets**
- I can give kind, helpful, and specific feedback to my critique partner.
- I can critique my writing partner’s narrative for organization and style.
- I can explain how authors of narratives use dialogue strategically to show their characters’ thoughts and feelings.

**Supporting Targets**
- I can identify the parts of my narrative that would benefit from added dialogue.
- I can revise my narrative to strategically add dialogue.

**Ongoing Assessment**
- Choose-your-own-adventure narrative (annotated first draft)
- Narrative Feedback recording form
- Participation in creation of Writing Dialogue anchor chart
- Characteristics of Narratives anchor chart
- Performance Task anchor chart
- Steps for Planning and Drafting My Narrative anchor chart
- Peer Critique Protocol anchor chart
- Steps for Revising My Writing anchor chart
- Writing Dialogue anchor chart
- Peer Critique protocol

**Anchor Charts & Protocols**
- Steps for Revising My Writing anchor chart

## Lesson 9
**Revising Narrative Texts: Including Dialogue**
- I can use dialogue and descriptions to show the actions, thoughts and feelings of my characters. (W.4.3a)
- I can use commas and quotation marks to identify speech and quotations from a text. (L.4.2b)
- I can use transitional words and phrases to show the sequence of events in a narrative text. (W.4.3b)

**Long-Term Targets**
- I can use sensory details to describe experiences and events precisely. (W.4.3c)
- I can express ideas using carefully chosen words. (L.4.3a)
- I can correctly use domain-specific vocabulary related to the topic of study. (L.4.6)

**Supporting Targets**
- I can use sensory details and vocabulary from my research to describe my animal and its defense mechanisms in my narrative.

**Ongoing Assessment**
- Choose-your-own-adventure narrative (annotated first draft)

**Anchor Charts & Protocols**
- Writing Dialogue anchor chart
- Steps for Revising My Writing anchor chart

## Lesson 10
**Revising Narrative Texts: Using Sensory Details and Vocabulary**
- I can use sensory details to describe experiences and events precisely. (W.4.3c)
- I can express ideas using carefully chosen words. (L.4.3a)
- I can correctly use domain-specific vocabulary related to the topic of study. (L.4.6)

**Long-Term Targets**
- I can use the writing process to produce clear and coherent writing (with support). (W.4.5)
- I can effectively participate in a conversation with my peers and adults. (SL.4.1)
- I can use dialogue and descriptions to show the actions, thoughts, and feelings of my characters. (W.4.3b)

**Supporting Targets**
- I can give kind, helpful, and specific feedback to my critique partner.
- I can critique my writing partner’s narrative for organization and style.
- I can explain how authors of narratives use dialogue strategically to show their characters’ thoughts and feelings.

**Ongoing Assessment**
- Choose-your-own-adventure narrative (annotated first draft)

**Anchor Charts & Protocols**
- Characteristics of Narratives anchor chart
- Performance Task anchor chart
- Steps for Planning and Drafting My Narrative anchor chart
- Peer Critique Protocol anchor chart
- Steps for Revising My Writing anchor chart
- Writing Dialogue anchor chart
- Peer Critique protocol

**Steps for Revising My Writing anchor chart**
<table>
<thead>
<tr>
<th>Lesson</th>
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</thead>
<tbody>
<tr>
<td>Lesson 11</td>
<td>Revising Narrative Texts: Exciting Endings</td>
<td>• I can write a conclusion to my narrative. (W.4.3d)</td>
<td>• I can write an ending that resolves the problem and brings the story to a close.</td>
<td>• Choose-your-own-adventure narrative (annotated first draft)</td>
<td>• Characteristics of Narratives anchor chart</td>
</tr>
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<td>• I can use transitional words and phrases to show the sequence of events in a narrative text. (W.4.3b)</td>
<td>• I can use transitional words and phrases to sequence events in my narrative.</td>
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<td>• Timely Transitions anchor chart</td>
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<td>• Steps for Revising My Writing anchor chart</td>
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<tr>
<td>Lesson 12</td>
<td>Reviewing Conventions and Editing Peers’ Work</td>
<td>• I can use conventions to send a clear message to my reader. (L.4.1g, L.4.2a, b, and d, and L.4.3b)</td>
<td>• I can check my peers’ work for correct capitalization.</td>
<td>• Conventions anchor charts</td>
<td>• Conventions anchor charts</td>
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<td></td>
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<td></td>
<td>• I can check my peers’ work for correct spelling (including homophones and affixes).</td>
<td>• Choose-your-own-adventure narrative (second drafts annotated for edits)</td>
<td>• Performance Task anchor chart</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>• I can check my peers’ work for correct punctuation at the ends of their sentences.</td>
<td></td>
<td>• Steps for Planning and Drafting My Narrative anchor chart</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>• I can check my peers’ work for correct conventions when writing dialogue.</td>
<td></td>
<td>• Chalk Talk protocol</td>
</tr>
<tr>
<td>Lesson 13</td>
<td>Writing Choice #2 of the Choose-Your-Own-Adventure Narrative</td>
<td>• I can write narrative text about real or imagined experiences or events. (W.4.3)</td>
<td>• I can write Choice #2 for my choose-your-own-adventure animal defense mechanisms narrative.</td>
<td>• End of Unit 3 Assessment: Writing Choice #2 of the choose-your-own-adventure animal defense mechanisms narrative</td>
<td>• Characteristics of Narratives anchor chart</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I can produce writing that is appropriate to task, purpose, and audience. (W.4.4)</td>
<td></td>
<td>• Tracking My Progress, End of Unit 3 recording form</td>
<td>• Performance Task anchor chart</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I can use conventions to send a clear message to my reader. (L.4.1g, L.4.2a, b, and d, and L.4.3b)</td>
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<td></td>
<td>• Steps for Planning and Drafting My Narrative anchor chart</td>
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<td>• Popcorn Read protocol</td>
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Copyright © 2013 by Expeditionary Learning, New York, NY. All Rights Reserved
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Lesson Title</th>
<th>Long-Term Targets</th>
<th>Supporting Targets</th>
<th>Ongoing Assessment</th>
<th>Anchor Charts &amp; Protocols</th>
</tr>
</thead>
</table>
| Lesson 14 | Publishing the Choose-Your-Own-Adventure Animal Defense Mechanisms Narrative | • I can write narrative text about real or imagined experiences or events. (W.4.3)  
• I can use grammar conventions to send a clear message to a reader or listener. (L.4.1, L.4.2)  
• I can express ideas using carefully chosen words. (L.4.3)  
• With support, I can use technology to publish a piece of writing. (W.4.6) | • I can publish my choose-your-own-adventure animal defense mechanisms narrative.  
• I can write a positive comment after reading a classmate’s writing. | • Choose-your-own-adventure animal defense mechanisms narratives (final copy)  
• Steps for Publishing My Narrative anchor chart |
### Optional: Experts, Fieldwork, And Service

**Experts:**
- Have a professional writer visit the class to discuss the writing process. Ask them to share how they research the topics they are going to write about.

**Fieldwork:**
- Visit the local zoo to observe the animals from the Expert Groups for additional research to inform writing.

**Service:**
- Share narratives with the local zoo—perhaps they can display them or use them for classes.

### Optional: Extensions

- Have students create a third choice ending for their narratives.
- Have students read aloud or perform their narratives for the class.
### Preparation and Materials


During this unit, students will need to reference the research notes they completed during Units 1 and 2 in order to write their narrative piece about their expert animal. It will be important for students to access both research journals during these lessons in order to include their facts and details from their research in their final performance task.
Grade 4: Module 2B: Unit 3:
Recommended Texts
The list below includes texts with a range of Lexile® text measures about animal survival. This provides appropriate independent reading for each student to help build content knowledge about the topic. Note that districts and schools should consider their own community standards when reviewing this list. Some texts in particular units or modules address emotionally difficult content.

It is imperative that students read a high volume of texts at their reading level in order to continue to build the academic vocabulary and fluency demanded by the CCLS.

Where possible, texts in languages other than English are also provided. Texts are categorized into three Lexile measures that correspond to Common Core Bands: below grade band, within band, and above band. Note, however, that Lexile® measures are just one indicator of text complexity, and teachers must use their professional judgment and consider qualitative factors as well. For more information, see Appendix 1 of the Common Core State Standards.

**Common Core Band Level Text Difficulty Ranges:**
(As provided in the NYSED Passage Selection Guidelines for Assessing CCSS ELA)
- Grades 2–3: 420–820L
- Grades 4–5: 740–1010L
- Grades 6–8: 925–1185L

<table>
<thead>
<tr>
<th>Title</th>
<th>Author and Illustrator</th>
<th>Text Type</th>
<th>Lexile Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexile measures below band level (under 740L)</td>
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<td></td>
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<tr>
<td>Monsters of the Deep</td>
<td>R. A. Montgomery (author)</td>
<td>Literature</td>
<td>550*</td>
</tr>
<tr>
<td>Jackie's Wild Seattle</td>
<td>Will Hobbs (author)</td>
<td>Literature</td>
<td>660</td>
</tr>
<tr>
<td>Charlotte's Web</td>
<td>E. B. White (author)</td>
<td>Literature</td>
<td>680</td>
</tr>
<tr>
<td>Unlikely Friendships</td>
<td>Jennifer Holland (author)</td>
<td>Informational</td>
<td>680*</td>
</tr>
<tr>
<td>Lost on the Amazon</td>
<td>R. A. Montgomery (author) Jason Millet (illustrator)</td>
<td>Literature</td>
<td>725</td>
</tr>
</tbody>
</table>

*Lexile based on a conversion from Accelerated Reading level.
<table>
<thead>
<tr>
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<th>Text Type</th>
<th>Lexile Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lexile measures within band level (740L–1010L)</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><em>Into the Wild (Warrior Series #1)</em></td>
<td>Erin Hunter (author)</td>
<td>Literature</td>
<td>790</td>
</tr>
<tr>
<td><em>Two Bobbies: A True Story of Hurricane Katrina, Friendship, and Survival</em></td>
<td>Kirby Larson (author)</td>
<td>Informational</td>
<td>810</td>
</tr>
<tr>
<td><em>Aye-Aye: An Evil Omen</em></td>
<td>Miriam Aronin (author)</td>
<td>Informational</td>
<td>830</td>
</tr>
<tr>
<td><em>Tracker</em></td>
<td>Gary Paulsen (author)</td>
<td>Literature</td>
<td>875*</td>
</tr>
<tr>
<td><em>Big Al</em></td>
<td>Andrew Clements (author)</td>
<td>Literature</td>
<td>880</td>
</tr>
<tr>
<td><em>Beardance</em></td>
<td>Will Hobbs (author)</td>
<td>Literature</td>
<td>890</td>
</tr>
<tr>
<td><em>Jangles</em></td>
<td>David Shannon (author)</td>
<td>Literature</td>
<td>900</td>
</tr>
<tr>
<td><em>Journey under the Sea</em></td>
<td>R. A. Montgomery (author)</td>
<td>Literature</td>
<td>900*</td>
</tr>
<tr>
<td><em>Collared Peccary: Cactus Eater</em></td>
<td>Stephen Person (author)</td>
<td>Informational</td>
<td>950</td>
</tr>
<tr>
<td><strong>Lexile measures above band level (over 1010L)</strong></td>
<td></td>
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</tr>
<tr>
<td><em>Cougar: A Cat with Many Names</em></td>
<td>Stephen Person (author)</td>
<td>Informational</td>
<td>1010</td>
</tr>
<tr>
<td><em>The Call of the Wild</em></td>
<td>Jack London (author)</td>
<td>Literature</td>
<td>1110</td>
</tr>
<tr>
<td><em>Animal Poems</em></td>
<td>Valerie Worth (author)</td>
<td>Poetry</td>
<td>NP</td>
</tr>
<tr>
<td><em>What’s for Dinner? Quirky, Squirmy Poems from the Animal World</em></td>
<td>Katherine Hauth (author) David Clark (illustrator)</td>
<td>Poetry</td>
<td>NP</td>
</tr>
</tbody>
</table>

*Lexile based on a conversion from Accelerated Reading level. Lexile® is a trademark of MetaMetrics, Inc., and is registered in the United States and abroad. Copyright © 2013 MetaMetrics
Preparing to Write: Determining Characteristics of the Format
## Preparing to Write:
Determining Characteristics of the Format

### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

<table>
<thead>
<tr>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can write for a variety of reasons. (W.4.10)</td>
</tr>
<tr>
<td>I can write narrative text about real or imagined experiences or events. (W.4.3)</td>
</tr>
</tbody>
</table>

### Supporting Learning Target

- I can determine the characteristics of a “choose-your-own-adventure” by analyzing an example.

### Ongoing Assessment

- Participation in creation of Choose-Your-Own-Adventure anchor chart
# Agenda

<table>
<thead>
<tr>
<th>1. Opening</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Engaging the Reader: Read-aloud of <em>Can You Survive the Wilderness?</em> (15 minutes)</td>
<td></td>
</tr>
<tr>
<td>B. Reviewing Learning Targets (5 minutes)</td>
<td></td>
</tr>
<tr>
<td>2. Work Time</td>
<td></td>
</tr>
<tr>
<td>A. Revisiting the Performance Task Prompt (10 minutes)</td>
<td></td>
</tr>
<tr>
<td>B. Rereading for Format: <em>Can You Survive the Wilderness?</em> (15 minutes)</td>
<td></td>
</tr>
<tr>
<td>C. Creating a Choose-Your-Own-Adventure Anchor Chart (10 minutes)</td>
<td></td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td></td>
</tr>
<tr>
<td>A. Sharing (5 minutes)</td>
<td></td>
</tr>
<tr>
<td>4. Homework</td>
<td></td>
</tr>
<tr>
<td>A. Read your independent reading book.</td>
<td></td>
</tr>
</tbody>
</table>

### Teaching Notes

- Students begin Unit 3 with a read-aloud from the choose-your-own-adventure mentor text, *Can You Survive the Wilderness?* This text is used throughout the unit as a model of the choose-your-own-adventure format, and in this lesson it is used as an example for students to examine when understanding and applying the components of a text written in this format.

- This lesson assumes that students have some basic knowledge of the differences between fiction and nonfiction texts through additional literacy instruction that occurs alongside the module; this may include independent reading, buddy reading, or literature circles. If students are unfamiliar with either, you might wish to teach a mini lesson on fiction versus nonfiction before this lesson.

- Students revisit their guiding questions and performance task from previous modules to help frame their understanding of where they are in the process of creating the final performance task.

- **Note:** In *Can You Survive the Wilderness?*, some conclusions in the adventure end in the “death” of the reader. Be sure to read the various endings in this text to ensure that your students will be comfortable with them. If you wish to control the ending students arrive at during the read-aloud so that the reader survives, choose the following paths:
  - Read Chapter 1 and choose the forests of southeastern Australia, turning to page 41. Read pages 41–43 and choose to try to find bird eggs, turning to page 45. Read pages 45–46, choosing to move onto the branch toward the nest, turning to page 54. Read page 54 and choose to build a signal fire, turning to page 67. Read pages 67–69.
  - Read Chapter 1 and choose the Alaskan wilderness, turning to page 11. Read pages 11–13 and choose to strike out in search of help, turning to page 16. Read page 16 and choose to head west away from the mountains, turning to page 22. Read page 22 and choose to stand your ground, turning to page 35. Read pages 35–36.

- When creating the Choose-Your-Own-Adventure anchor chart, students should mention the elements of a narrative: characters, plot, setting, description, dialogue, etc. Do not go into detail in explaining these elements; they are discussed more deeply in Lesson 4.
Preparing to Write: Determining Characteristics of the Format

**Agenda**

- **In advance:**
  - Display Guiding Questions and Performance Task anchor charts.
  - Prepare chart paper for the Choose-Your-Own-Adventure anchor chart.
  - Review Fist to Five Checking for Understanding technique (see Appendix).
  - Decide which version of the Performance Task template students use as they start their writing (see supporting materials). Version 1 is a template that students type into. Version 2 is a template for handwritten publication. (In this lesson, students just look at both templates. In Lesson 2, students get their own copies of whichever template you or they select).
- **Post:** Learning targets.

**Lesson Vocabulary**

<table>
<thead>
<tr>
<th>choose-your-own adventure book, challenges, encounters, format</th>
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</table>

**Materials**

- *Can You Survive the Wilderness?* (book; one to display; for teacher read-aloud)
- Guiding Questions anchor chart (from Unit 1, Lesson 1)
- Equity sticks
- Performance Task anchor chart (from Unit 1, Lesson 1)
- Performance Task template (Version 1 for Typed Publication; one to display)
- Performance Task template (Version 2 for Handwritten Publication; one to display)
- Sticky notes (two per student)
- Choose-Your-Own-Adventure anchor chart (new; co-created with students during Work Time C)
## Opening

### A. Engaging the Reader: Read-aloud of *Can You Survive the Wilderness?* (15 minutes)

- Congratulate the class for wrapping up Unit 2. Tell students they now have a strong foundation of knowledge about their expert group animal and its defenses and about how writers use research to inform their writing.
- Display the cover of *Can You Survive the Wilderness?* so all students can see. Read the title and author aloud to the class. Ask:
  * “What do you notice about this book? What do you think it’s about? Is it fiction or non-fiction?”
- Read the back cover of the book, then ask:
  * “Now what do you think this book is about? Is it fiction or non-fiction?”
- Display the Table of Contents to students. Read the chapter titles aloud. Ask:
  * “What do you notice about these pages? What do you wonder about these pages?”
- Listen for students to notice that the titles are different locations/settings.
- Display pages 106–112 (“Real Survivors,” “Survival Quiz,” Glossary, Bibliography, Index). Ask:
  * “What do you notice about these pages? What do you wonder about these pages?”
- Explain to students that they will be using this book as a mentor text throughout this unit. Tell them that a mentor text is an example of good writing.
- Read aloud pages 5–9, including the directions at the bottom of pages 7 and 9. Allow students to choose which path to take at the end of page 9. Continue reading the selected path, reading aloud directions and allowing students to choose the adventure while reading.
- As you read aloud, ask students what they notice and wonder about the text. Listen for students to notice that the photographs and captions are factual information, while the adventure is realistic fiction.
- Explain that the book is written in a format commonly called “choose-your-own-adventure.” Tell students that they will use this book throughout the unit to learn about writing this type of format for their performance task, a choose-your-own-adventure animal defense narrative.
- Explain that today you will read more from this book to learn about this format and that the class will hear more read from this book in the next few lessons. Explain that although they will not have their own copy of the book, they may choose to read it on their own or with a buddy during independent reading.

## Meeting Students’ Needs

- Whole class discussions encourage respectful and active listening, as well as social construction of knowledge.
- Hearing a complex text read slowly, fluently, and without interruption or explanation promotes fluency for students; they are hearing a strong reader read the text aloud with accuracy and expression, while simultaneously looking at and thinking about the words on the printed page. Set clear expectations that students read along silently in their heads as you read the text aloud.
- You might wish to plan the adventure and choices you take students on through the book. If allowing students to choose, consider using equity sticks to call on one student to choose or allowing the class to vote by raising hands.
### B. Reviewing Learning Targets (5 minutes)

- Display the **Guiding Questions anchor chart**. Use **equity sticks** to call on a student to read the first question aloud:
  - “How do animals’ bodies and behaviors help them survive?”
- Invite students to use the Fist to Five Checking for Understanding technique to show how confident they are in answering that question, from a “fist” meaning they are completely unsure of the answer, to a “five” meaning they can give a response with many examples to support their thinking.
- Use equity sticks to call on a student to read the second question aloud:
  - “How can a writer use his or her knowledge on a topic to inform and entertain?”
- Invite students to use the Fist to Five again to show how confident they are in answering the second question.
- Explain to students that they are probably feeling pretty confident in explaining the first part of that question—how writers use their knowledge on a topic to inform—but perhaps not as confident with the second part, to entertain.
- Use equity sticks to call on a student to read the learning target:
  - “I can determine the characteristics of a “choose-your-own-adventure” by analyzing an example.”
- Tell students they will be focusing on the second part of the second guiding question, thinking about how writers use their knowledge on a topic to entertain, by writing a narrative using the choose-your-own-adventure format.

### Meeting Students’ Needs

- Discussing and clarifying the language of learning targets helps build academic vocabulary.
A. Revisiting the Performance Task Prompt (10 minutes)

- Display the Performance Task anchor chart (from Unit 1, Lesson 1) and remind students that they are working toward writing a narrative during this module. Point to the second bullet point of the prompt (“an informational page…”) and the sixth bullet point (“two sketches…”) on the anchor chart. Remind students they have completed these parts of their performance task already.
- Point to the remaining bullet points. Explain that they will be working on these parts of the performance task in this unit.
- Explain to the class that before they can begin sketching and writing about the animal for their performance task, they will need to research to learn more about it.
- Circle the phrase choose-your-own adventure book. Explain to students that they will discuss the format for this type of book later in the lesson.
- Use equity sticks to call on a student to read the third, fourth, and fifth bullet points of the prompt aloud:
  - “A setting-the-stage page explaining how to read the book and the possible challenges your animal could encounter (in question form).”
  - “An introduction to your narrative describing the challenge your animal encounters and two choices (defense mechanisms) it could make to survive.”
  - “A page for each choice (defense mechanism) describing the experience or events showing how your animal responds to the choice.”
- Ask:
  * “Based on the anchor chart, how will your writing be organized?”
- Listen for responses like: “It will have a beginning, middle, and two different endings.”
- Display each page of the Performance Task template. Answer any clarifying questions for each page.

<table>
<thead>
<tr>
<th>Work Time</th>
<th>Meeting Students’ Needs</th>
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</thead>
<tbody>
<tr>
<td>A. Revisiting the Performance Task Prompt (10 minutes)</td>
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<td></td>
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<tr>
<td>lesson.</td>
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</tr>
<tr>
<td>• Use equity sticks to call on a student to read the third, fourth, and</td>
<td></td>
</tr>
<tr>
<td>fifth bullet points of the prompt aloud:</td>
<td></td>
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<tr>
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<td></td>
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<td>possible challenges your animal could encounter (in question form).”</td>
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<td>• Ask:</td>
<td></td>
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<tr>
<td>* “Based on the anchor chart, how will your writing be organized?”</td>
<td></td>
</tr>
<tr>
<td>• Listen for responses like: “It will have a beginning, middle, and</td>
<td></td>
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<tr>
<td>two different endings.”</td>
<td></td>
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<tr>
<td>• Display each page of the Performance Task template. Answer any</td>
<td></td>
</tr>
<tr>
<td>clarifying questions for each page.</td>
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</tbody>
</table>
B. Rereading for Format: *Can You Survive the Wilderness?* (15 minutes)

- Explain to students that before they begin writing their own choose-your-own adventure narratives, they need to understand how the choose-your-own adventure format is different from other narratives.
- Invite students to turn and talk:
  - “What do I mean by the format of the book?”
- Use equity sticks to call on one or two students to share their partners’ responses. Listen for responses like: “The format is how the book is organized or structured.”
- Explain to students that you will reread pages 5–9 aloud, choosing the same path as earlier in the lesson. Tell students that as you read aloud, they should think about what they notice and wonder about the choose-your-own-adventure format. Distribute two sticky notes to each student and invite them to write down what they notice on one sticky note and what they wonder on the other.
- Read aloud pages 5–9 and continue reading, following the path used in the opening. Pause after each paragraph so students can record their notes. If necessary, prompt by asking: “What makes this format different from other books you have read?” or “What questions do you have about the format of this book?”
- Clarify the format of the text as needed. Emphasize that the book has multiple options for an ending, depending on what choice the reader makes.
### C. Creating a Choose-Your-Own-Adventure Anchor Chart (10 minutes)

- Begin a new **Choose-Your-Own-Adventure anchor chart**. Underneath the title, write: “A text written in the choose-your-own-adventure format ...” Ask:
  - “What did you notice about the format of *Can You Survive the Wilderness*?”
- Give students a moment to think and review their notes. Then use equity sticks to select students to share their thinking. Record students’ responses and add your own as necessary.
- The chart should contain formatting points about the text—for instance, that it:
  - Is written in the second-person point of view (“you”)
  - Has the reader take on the role of the adventurer
  - Is interactive
  - Presents the protagonist (the reader) with a choice after a couple of pages, which leads to two or more paths and eventually to two or more endings
  - Is realistic fiction/narrative—based on facts and research; includes characters, plot, setting, problem/resolution, description, dialogue
- Explain to students that their narratives will be written in this format and that they will be referring to this anchor chart throughout the unit.
## Closing and Assessment

<table>
<thead>
<tr>
<th>A. Sharing (5 minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tell students that in a moment you would like them to share with a partner to discuss the performance task, using the following prompt:</td>
</tr>
<tr>
<td>* “What is one idea you have for your narrative, or one thing you are excited about for this performance task?”</td>
</tr>
</tbody>
</table>

## Homework

| Read your independent reading book. |
Grade 4: Module 2B: Unit 3: Lesson 1
Supporting Materials
Delete and Insert Your Title

By Delete this underlined text and insert your name here
Performance Task Template
(Version 1 for Typed Publication)

All about **Delete this underlined type and insert the name of your animal**

Type your text here—delete this line
About the Adventure

Type your text here—delete this line
Introduction

Type your introduction here—delete this line

<table>
<thead>
<tr>
<th>Choice #1</th>
<th>Choice #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type defense choice #1 here—delete this line.</td>
<td>Type defense choice #2 here—delete this line</td>
</tr>
<tr>
<td>Turn to page 4</td>
<td>Turn to page 5</td>
</tr>
</tbody>
</table>
Choice #1

Insert caption here. Draw your sketch above—delete this line.

Begin typing Choice #1 here—delete this line.
Performance Task Template

(Version 1 for Typed Publication)

Choice #2

Insert caption here. Draw your sketch above—delete this line.

Begin typing Choice #1 here—delete this line.
Performance Task Template

(Version 2 for Handwritten Publication)

By ____________________________

By _______________________________________________
Performance Task Template
(Version 2 for Handwritten Publication)

All about_______________

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Performance Task Template
(Version 2 for Handwritten Publication)

Introduction

Choice #1

Choice #2

______________________ Turn to page 4

______________________ Turn to page 5
Performance Task Template

(Version 2 for Handwritten Publication)

Choice #1

__________________________________________________________________________

__________________________________________________________________________

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__________________________________________________________________________
Teacher Directions: Write the following on chart paper to create this anchor chart.

Choose-Your-Own-Adventure
A text written in the choose-your-own-adventure format ...

* Is written in the second-person point of view (“you”)

* Has the reader take on the role of the adventurer

* Is interactive

* Presents the protagonist (the reader) with a choice after a couple of pages, which leads to two or more paths and eventually two or more endings

* Is realistic fiction/narrative—based on facts and research; includes characters, plot, setting, problem/resolution, description, dialogue
Setting a Purpose for Writing: Understanding the Performance Task and Getting Started
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can write informative texts that convey ideas and information clearly. (W.4.2)
- I can use grammar conventions to send a clear message to a reader or listener. (L.4.1, L.4.2)
- I can express ideas using carefully chosen words. (L.4.3)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>- I can prepare a final copy of my informative page for my choose-your-own-adventure animal defense narrative.</td>
<td>- Students’ informative pages</td>
</tr>
<tr>
<td>- I can collaborate with my peers to write an About Your Adventure page for my choose-your-own-adventure animal defense narrative.</td>
<td>- Participation in shared writing of About Your Adventure page</td>
</tr>
</tbody>
</table>
### Agenda

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Opening</td>
</tr>
<tr>
<td></td>
<td>A. Engaging the Writer: Read-aloud of <em>Can You Survive the Wilderness?</em> (10 minutes)</td>
</tr>
<tr>
<td></td>
<td>B. Reviewing Learning Targets (5 minutes)</td>
</tr>
<tr>
<td>2.</td>
<td>Work Time</td>
</tr>
<tr>
<td></td>
<td>A. Shared Writing: About Your Adventure Page (25 minutes)</td>
</tr>
<tr>
<td></td>
<td>B. Modeling: Preparing the Informative Page (10 minutes)</td>
</tr>
<tr>
<td>3.</td>
<td>Closing and Assessment</td>
</tr>
<tr>
<td></td>
<td>A. Concentric Circles (8 minutes)</td>
</tr>
<tr>
<td></td>
<td>B. Reviewing Homework (2 minutes)</td>
</tr>
<tr>
<td>4.</td>
<td>Homework</td>
</tr>
<tr>
<td></td>
<td>A. Revise and add your informative page into your Performance Task template.</td>
</tr>
</tbody>
</table>

### Teaching Notes

- This lesson begins with a read-aloud of the About Your Adventure page in *Can You Survive the Wilderness?* Students record what they notice and wonder about the structure and information shared on this page to create an About Your Adventure anchor chart. This anchor chart is referred to during the Shared Writing in Work Time A.
- Students work together to write a Class About Your Adventure page for their narratives. Because this page is not specific to their expert group animals, all students will be using this page in their final narratives.
- In shared writing, the teacher and students compose text together, both contributing their thoughts and ideas to the process, while the teacher acts as scribe, writing the text as it is composed. Shared writing enables teachers to make the writing process concrete and visible to students. This allows students to focus exclusively on the thinking involved in writing, not the process.
- Shared writing is also a powerful way to model and guide key skills and concepts related to the writing process (e.g., organizing, drafting, revision, mechanics, and conventions). Students gain competence and confidence in their writing skills as the teacher models and guides the thinking process writers go through. Consider modeling revising or editing the completed Class About Your Adventure page for specific areas you have noticed your students struggling with. For homework in this lesson, students copy their informative page drafts from Unit 2 into their Performance Task template. Be sure to have read through their drafts and given feedback on the revision and editing mini lessons from Unit 2, Lessons 10 and 11 before this lesson. If your students are using Performance Task Template (Version 1 for typed publication), be sure students either have a digital copy of the template to take and use at home, or have additional time to type this page into the template during the school day.
- If there is time remaining after modeling, have students begin their writing homework.
- In advance:
  - Display Performance Task anchor charts.
  - Prepare chart paper for About Your Adventure anchor chart.
  - Read and give feedback to students on their informative page drafts from Unit 2.
  - Review Concentric Circles protocol.
<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
</table>
| purpose           | • *Can You Survive the Wilderness?* (book; one to display; use for read-aloud)  
|                   | • Sticky notes (two per student)  
|                   | • About Your Adventure Page anchor chart (new; co-created in Opening A)  
|                   | • Equity sticks  
|                   | • Performance Task anchor chart (from Unit 1, Lesson 1)  
|                   | • Document camera (optional)  
|                   | • Class About Your Adventure page (new; co-written in Work Time B; see sample in supporting materials)  
|                   | • Performance Task template (Version 1 for Typed Publication or Version 2 for Handwritten Publication; one to display)  
|                   | • Millipede informative page draft (from Unit 2)  
|                   | • Informative page drafts (from Unit 2; one per student, with teacher feedback) |
Opening

A. Engaging the Writer: Read-aloud of Can You Survive the Wilderness? (10 minutes)

- Display the cover of Can You Survive the Wilderness? so all students can see. Explain to the class you will be rereading page 5, “About Your Adventure,” aloud.

- Distribute sticky notes to students. Explain to the class that you will be reading this page twice. The first time, they should record what they notice about the text on one of the sticky notes. The second time, they should record what they wonder on the other sticky note.

- Explain to students that they should listen while you read aloud page 5 and record what they notice about the structure of the text and the kind of information the author shares. Read aloud page 5.

- Read aloud page 5 a second time. Remind students that this time, they should record what they wonder on their other sticky note.

- Begin a new About Your Adventure Page anchor chart. Underneath the title write: “The About Your Adventure page of a choose-your-own-adventure text ...” Ask:

  * “What did you notice about this page in Can You Survive the Wilderness?”

- Give students a moment to think and review their notes. Then use equity sticks to select students to share their thinking. Record students’ responses and add your own as necessary.

- The chart should contain points such as:
  - Gives a general overview of the problem in the book
  - Asks questions
  - Explains how the book is set up
  - Explains how to use the book
  - The first paragraph sets up the situation of the book.
  - The second paragraph explains how to use the book.

Meeting Students’ Needs

- Anchor charts provide a visual cue to students about what to do when you ask them to work independently. They also serve as note-catchers when the class is co-constructing ideas.

- Adding visuals or graphics to anchor charts can aid students in remembering or understanding key ideas or directions.
**Opening (continued)**

<table>
<thead>
<tr>
<th>B. Reviewing Learning Targets (5 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Invite students to read the learning targets to themselves:</td>
<td>• Discussing and clarifying the language of learning targets helps build academic vocabulary.</td>
</tr>
<tr>
<td>* I can prepare a final copy of my informative page about my expert group animal for my choose-your-own adventure animal defense narrative.</td>
<td></td>
</tr>
<tr>
<td>* I can collaborate with my peers to write an About Your Adventure page for my choose-your-own-adventure animal defense narrative.</td>
<td></td>
</tr>
<tr>
<td>• Display the <strong>Performance Task anchor chart</strong>.</td>
<td></td>
</tr>
<tr>
<td>• Use equity sticks to call on a student to read the third bullet point of the prompt aloud:</td>
<td></td>
</tr>
<tr>
<td>* “An About the Adventure page explaining how to read the book and the possible <em>challenges</em> your animal could encounter (in question form)”</td>
<td></td>
</tr>
<tr>
<td>• Explain to students that because their narratives will be written in the choose-your-own-adventure format, they will need to include an About Your Adventure page. Tell students they will create one as a class later in the lesson.</td>
<td></td>
</tr>
<tr>
<td>• Tell students that after they write that page, they will learn how to prepare their informative page about their expert group animal from Unit 2 to become a part of their narrative.</td>
<td></td>
</tr>
</tbody>
</table>
**A. Shared Writing: About Your Adventure Page (25 minutes)**

- Begin a shared writing experience in order to write the Setting the Stage page by gathering students so they can all see a piece of posted chart paper or a piece of paper projected through a document camera for the **Class “About Your Adventure” page**. Be sure that the class can see the About Your Adventure anchor chart.

- Review the **purposes** of each part of the performance task. Ask:
  * “What is the purpose of the informative page?”
  * “What is the purpose of the About Your Adventure page?”
  * “What is the purpose of the narrative?”

- Listen for responses like: “To teach our reader about our expert group animal’s defense mechanisms.”
- Listen for responses like: “To explain how to read the choose-your-own-adventure narrative.”
- Listen for responses like: “To entertain the reader.”

- Say something like: “We will now begin writing the About Your Adventure page for our narratives.” Ask:
  * “What kind of information will be on our About Your Adventure page?” Listen for responses like: “General information about animal defense mechanisms and directions to the reader about how to use the book.”

- Say something like: “Since the information on this page is about general animal defense mechanisms and directions for the reader, and that information is the same regardless of the expert group animal you have been researching, we will all be using the same page in our narratives.”

- Ask students to help you begin the About Your Adventure page by choosing a student to come up to the paper and write “About Your Adventure” in the center of the first line on the page (see example in supporting materials).

- Remind students that they are using **Can You Survive the Wilderness?** as a mentor text to write their own choose-your-own-adventure narratives.

- Invite students to turn and talk to a partner. Ask:
  * “If the first paragraph of an About Your Adventure page sets up the situation in the book, what should our first paragraph be about? What situation are we setting up?”

- Use equity sticks to call on students to share what they talked about with their partner. Listen for responses like: “The first paragraph should be about animals using their defense mechanisms.”
### Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>An alternative to having students copy the shared writing of the class’ About the Adventure page is to type it up and distribute it to students to include in their performance task after this lesson.</td>
</tr>
</tbody>
</table>

- Reread the first paragraph on page 5 of *Can You Survive the Wilderness?* aloud. Invite students to turn and talk to a partner about what the first sentence of the Class About Your Adventure page should be. Ask a student to share what they talked about with their partner and have them come write it on the letter on the next line.

- Listen for the student to share something like: “Animals are out searching for food.”

- Drawing from the ideas the students shared, craft and write a sentence that introduces the situation of the book and uses *Can You Survive the Wilderness?* as a model. (See the example in supporting materials.) Continue this process to write the rest of the first paragraph, being sure to model it after the first paragraph on page 5.

- Invite students to turn and talk to a partner. Ask:
  - “If we’re modeling our page after our mentor text, how should the first sentence of the second paragraph begin?”

- Use equity sticks to call on students to share what they talked about with their partner. Listen for responses like: “The second paragraph should start with a question.”

- Drawing from the ideas the class shared, craft and write a question that hooks the reader and uses *Can You Survive the Wilderness?* as a model (see the example in supporting materials). Continue this process to write the rest of the second paragraph, being sure to model it after the second paragraph on page 5.

- Invite students to choral read the finished About Your Adventure page they wrote as a class.

- Based on which Performance Task template your class is using, do the following:
  - If using **Performance Task template (Version 1 for Typed Publication)**, type and save the class version of the About Your Adventure Page into the template so that all students have this page completed in their templates.
  - If students are hand-writing the performance task, distribute **Performance Task template (Version 2 for Handwritten Publication)** and ask students to turn to the About Your Adventure page.

- Explain to students that they should now copy the Class About Your Adventure page onto their page in the Performance Task template.

- Give students 10 minutes to copy the Class About Your Adventure page, then invite students to put their materials to the side.
### B. Modeling: Preparing the Informative Page (10 minutes)

- Explain to students that for homework, they will be preparing their informative pieces from Unit 2 to become the informative page in their narratives.

- Set purpose: Remind students that they will be including this informative piece in their performance task as a way to introduce the animal that their narratives will be about.

- Tell them that in order to prepare their informative page, they need to be sure all the information is complete and correct and reflects changes made based on teacher feedback. For homework, they will polish their writing. Remind them that they now have an edited draft complete with their revisions for supporting details and word choice.

- Using the revised and edited **Millipede informative page draft**, demonstrate how to copy over a draft onto the “All About _____” page of the Performance Task template.

- Answer any clarifying questions.

- Distribute students’ **informative page drafts** with teacher feedback and invite them to put their drafts and Performance Task templates into a folder to take home.
### Closing and Assessment

#### A. Concentric Circles (8 minutes)
- Tell students that in a moment you would like them to gather in two circles, one facing in and the other facing out, for Concentric Circles (see Appendix) to discuss the performance task.
- For the first round of Concentric Circles, ask students to share a contribution they made in writing the Class About Your Adventure page. Give students 2 minutes to share before moving to their next partner.
- Next, ask students in the inside circle to move two people to their right and ask students to share what the purpose of each part of the performance task is. Give students 2 minutes to share.

#### B. Reviewing Homework (2 minutes)
- Remind students that their homework is to revise and add their informative page drafts onto the appropriate page of their Performance Task templates. Answer any clarifying questions students may have about this process.

### Meeting Students' Needs
- Use of protocols such as Concentric Circles allows for total participation of students. It encourages critical thinking, collaboration, and social construction of knowledge. It also helps students to practice their speaking and listening skills.

### Homework

- Revise and add your informative page into your Performance Task template.
**Teacher Directions**: Write the following on chart paper to create this anchor chart:

**Choose-Your-Own-Adventure**
A text written in the choose-your-own-adventure format ...

* is written in the second-person point of view (“you”)
* has the reader take on the role of the adventurer
* is interactive
* after a couple of pages, presents the protagonist (reader) with a choice, which leads to two or more options and eventually to two or more endings
* is realistic fiction/narrative—based on facts and research; includes characters, plot, setting, description, dialogue
Animals are out searching for food. Predators can be anywhere around them, waiting for their turn to eat. The prey has to be ready to defend itself in a moment’s notice.

How will the animal defend itself? In this book you will read about a specific animal and its encounters with its predators. Chapter 1 sets the scene. Then you choose which path to read. The choice you make can change the story entirely. After you finish one path, go back and read the other choice for a new story and adventure.

YOU CHOOSE the path the animal takes through its adventure.
Planning Ideas: Developing a Character Profile
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can write narrative text about real or imagined experiences or events. (W.4.3)
I can introduce the narrator and/or characters of my narrative. (W.4.3a)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can listen as my peers share their writing and give specific praise for their work.</td>
<td>• Informative page (from homework)</td>
</tr>
<tr>
<td>• I can synthesize information to develop an accurate character profile supported by research.</td>
<td>• Character Profile graphic organizer</td>
</tr>
</tbody>
</table>
### Agenda

<table>
<thead>
<tr>
<th>1. Opening</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Engaging the Writer: Sharing (15 minutes)</td>
<td>- In the opening of the lesson, students celebrate their hard work writing informative texts by sharing and reflecting in small groups on their informative page for the performance task (completed in Unit 2 and revised for homework).</td>
</tr>
<tr>
<td>B. Reviewing Learning Targets (5 minutes)</td>
<td>- The Author’s Chair Celebration anchor chart (see supporting materials) provides steps and guidelines for students as they share their work. Grouping for this is flexible; however, the more students share in a group, the longer this portion of the lesson will be. The timing of the lesson is based on groups of three with a mix of expert group animals represented in each group. Adjust as needed given your preferences and the needs of your students.</td>
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</tbody>
</table>

<table>
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<tr>
<th>2. Work Time</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Developing a Character Profile for the Millipede (10 minutes)</td>
<td>- Be sure students have prepared their informative pages (assigned for homework in Lesson 2) so they can share them during the Author’s Chair Celebration. If students have not finished revising their work, find time in class for them to do so prior to the lesson.</td>
</tr>
<tr>
<td>B. Partner Practice: Developing a Character Profile for the Millipede (5 minutes)</td>
<td>- The rubric provided in the supporting materials of this lesson is based on the PARCC Draft of Expanded Scoring Rubric for Analytic and Narrative Writing (also included in supporting materials). The learning targets on the Choose-Your-Own-Adventure Narrative Rubric are aligned with the PARCC rubric but have been modified to fit this module’s specific content focus and to be in more student-friendly language. (This unit does not include a New York State writing rubric since there is not currently a narrative writing version of the NYS rubric).</td>
</tr>
<tr>
<td>C. Independent Practice: Developing a Character Profile for the Expert Group Animal (20 minutes)</td>
<td>- To succeed in this lesson, and in the writing of their narratives, students have to manage their materials well. Consider asking students to organize their Animal Defenses research folders before this lesson.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Closing and Assessment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Sharing (5 minutes)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Homework</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Read “Powerful Polly” for the gist.</td>
<td>- In advance:</td>
</tr>
<tr>
<td></td>
<td>– Review, prepare, and display Author’s Chair Celebration anchor chart.</td>
</tr>
<tr>
<td></td>
<td>– Create groups of three to four students for sharing in the Author’s Chair Celebration. Be sure that these groups represent different expert group animals.</td>
</tr>
<tr>
<td></td>
<td>– Display Choose-Your-Own-Adventure anchor chart.</td>
</tr>
<tr>
<td></td>
<td>– Collect Unit 1 and Unit 2 research materials for modeling.</td>
</tr>
</tbody>
</table>
## Planning Ideas:
### Developing a Character Profile

<table>
<thead>
<tr>
<th>Lesson Vocabulary</th>
<th>Materials</th>
</tr>
</thead>
</table>
| facts, details, character profile, physical description, personality traits, daily life, behavior, family, habitat description | • Author’s Chair Celebration anchor chart (new; teacher-created)  
• Document camera  
• Sticky notes (three or four per student)  
• Choose-Your-Own-Adventure Narrative Rubric (one per student and one to display)  
• Choose-Your-Own-Adventure anchor chart (from Lesson 1)  
• Research texts (from Units 1 and 2; one per student and one to display)  
  – *Venom* (book; from Unit 1, Lesson 1; one for the class, for students to refer to as needed)  
  – “Award-Winning Survival Skills” (from Unit 1, Lesson 2; one per student)  
  – *Animal Behaviors: Animal Defenses* (book; distributed in Unit 1, Lesson 5; one per student)  
• Animal Defenses Research Journal (from Unit 1; one per student and one to display)  
• Expert Group Animal Research Journal (from Unit 2; one per student and one to display)  
• Character Profile graphic organizer (one per student and one to display)  
• Millipede Character Profile graphic organizer (completed, for teacher reference)  
• “Powerful Polly” pufferfish narrative (one per student) |
### Opening

**A. Engaging the Writer: Sharing (15 minutes)**

- Tell students that they have come a long way as writers. Remind them that at the beginning of the year they were working on writing strong paragraphs about the Iroquois (Module 1). Now they have also built expertise as writers of informative texts. Tell students that you are proud of the progress they have made as writers and would like to celebrate with them by holding an “Author’s Chair Celebration.”

- Post the **Author’s Chair Celebration anchor chart** or copy and display the steps below using a **document camera**. Explain that an Author’s Chair Celebration is an event similar to a book signing that authors sometimes hold at bookstores to celebrate publishing their work. Tell students that at these events, the author reads their work to an audience and signs copies.

- Explain that at the end of the module students have an opportunity to celebrate with a small audience at their own Author’s Chair Celebration to read their finished choose-your-own-adventure animal defense narratives.

- Go on to explain that today, they will practice this type of sharing by sharing the informative page they prepared for homework with a small group.

- Review the steps on the Author’s Chair Celebration anchor chart and revisit the following learning target: “I can listen as my peers share their writing and give specific praise for their work.”

- Explain that as they share their informative pages (from homework) about their expert group animals, they should focus on the strengths of their group members’ work. They will write this praise on a **sticky note** for their group member after each share. Clarify or model kind praise as needed.

- Split students into their groups (three or four, with a mix of informative pages on different expert group animals). Tell students that they will have about 5 minutes for each person in their group to read, reflect, and receive praise.

- Circulate as students share their work, reflect, and give each other praise. Make sure students are taking turns about every 5 minutes. Write the following prompt on the board, and if a group finishes early have members discuss it:

* “How have we grown as writers since the beginning of the year?”

### Meeting Students’ Needs

- As an alternative to an Author’s Chair Celebration anchor chart, you can copy the steps below for each group and display them using a document camera. This may be better for students with visual impairments or ELL students.
Opening (continued)

B. Reviewing Learning Targets (5 minutes)
• Display and distribute the Choose-Your-Own-Adventure Narrative Rubric and invite students to read the first criteria box for Ideas to themselves:
  • “I can create a narrative based on facts and details from my research.”
• Review vocabulary from this criterion by asking:
  • “What do we mean by the term based on in this learning target?”
• Listen for responses such as:
  – “The narrative has to have facts and details from our research in it.”
• Ask:
  • “What do we mean by facts and details?”
• Listen for responses such as:
  – “Facts are information that is true and accurate—things that actually happen.”
  – “Details are information that describe or give more information about something.”
• Refer to the last bullet point on the Choose-Your-Own-Adventure anchor chart: “Is realistic fiction/narrative—based on facts and research; includes characters, plot, setting, description, dialogue.”
• Underline “characters, plot, setting, description, dialogue” and tell students these must be based on facts and details from their research to meet this target on the rubric.
• Invite the class to read the Meets, Partially Meets, and Does Not Meet descriptions for this target:
  – Meets: Incorporates many facts and details from research on my animal and its defense mechanisms.
  – Partially Meets: Incorporates some facts and details from research on my animal and its defense mechanisms.
  – Does Not Meet: Incorporates few facts and details from research on my animal and its defense mechanisms.
• Clarify for students that although this narrative is based on research, it is still fiction, so students will also include many details from their imagination. Explain that students will be reading a model of a narrative based on research for their homework and that the class will talk more about the balance between facts and fiction in their stories after examining this model.

Meeting Students’ Needs
• Discussing and clarifying the language of learning targets helps build academic vocabulary.
**Opening (continued)**

- Post the learning target: “I can synthesize information to develop an accurate character profile supported by research.”
- Explain to students that today they will take the first steps toward meeting these criteria by developing an animal character based on their research from Units 1 and 2.

---

**Work Time**

**A. Developing a Character Profile for the Millipede (10 minutes)**

- Tell students that the main character is one of the most important elements of a fictional story, so today they will start planning their narratives by thinking about who their characters will be.
- Ask them to watch as you begin to develop a research-based character of a millipede. Students then do the same with their own character for their expert group animal.
- Explain that you know that using their research notes will be really important in helping them do this. Display the Character Profile graphic organizer. (Do not distribute it yet to students.)
- Think aloud and model recording in the Physical Description box of the Character Profile graphic organizer using your research notes. Explain that this section will help you to better describe your character when writing. Explain that this section will also be based on your research, but because this is for a fictional story you will have to do some imagining as well. For example, you might say something like: “After reviewing my research notes (display notes), I am beginning to get a picture of my character in my mind. I see a millipede that is long and skinny. He has a hard exoskeleton and 60 segments. I also know that millipedes have two legs on each segment, so that means my character will have 120 legs.” Model recording the information and citing the sources.
- Next, tell students that you would like them to imagine your character’s personality. Have them turn to a partner and share their thoughts about what traits this millipede may have. Have a few more pairs share out.
- Encourage students, as they move into developing their own character, to think about who their character might have been had they been a real animal in this situation. Ask:
**Planning Ideas:**

**Developing a Character Profile**

<table>
<thead>
<tr>
<th>Work Time (continued)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>* “How would she/he have reacted to different situations in his/her world?”</td>
<td></td>
</tr>
<tr>
<td>* “How would he/she have reacted to noticing a predator is approaching?”</td>
<td></td>
</tr>
<tr>
<td>* “Would he/she have been brave, scared, or nervous?”</td>
<td></td>
</tr>
<tr>
<td>• Tell students that these thinking questions help them develop a more realistic and complex character.</td>
<td></td>
</tr>
<tr>
<td>• Next, model recording in the Personality Traits box of the Character Profile. For example, you might say: “After reviewing my research notes, I imagine him to be curious but also cautious because he avoids predators. He’s also hard-working, always looking around for food to eat.” (Jot notes about his personality: curious, hard-working, cautious.) Be sure to cite sources for factual details.</td>
<td></td>
</tr>
<tr>
<td>• Next, model recording in the Daily Life box of the Character Profile. For example, you might say: “After reviewing my research notes, I imagine him to be walking around the forest looking for food to eat, but being careful to stay away from predators while he does that.” (Jot notes about his daily life/behaviors: looks for food, walks around.) Be sure to cite sources for factual information.</td>
<td></td>
</tr>
<tr>
<td><strong>B. Partner Practice: Developing a Character Profile for the Millipede (5 minutes)</strong></td>
<td></td>
</tr>
<tr>
<td>• Point to the final three boxes of the graphic organizer: Family/Habitat Description, Fun Facts, and Other. Tell students that you would like them to give it a try. Give students a few minutes to brainstorm:</td>
<td></td>
</tr>
<tr>
<td>* “What could we add to these final boxes?”</td>
<td></td>
</tr>
<tr>
<td>• Remind students to refer to the research that supports their thinking. Call on a few pairs to share. Add their comments to complete the final boxes of the graphic organizer. Notes might look like:</td>
<td></td>
</tr>
<tr>
<td>– Lives outdoors on the damp forest floor</td>
<td></td>
</tr>
<tr>
<td>– Lives by a stream</td>
<td></td>
</tr>
<tr>
<td>– Favorite sound is birds chirping</td>
<td></td>
</tr>
<tr>
<td>– Favorite color is brown</td>
<td></td>
</tr>
<tr>
<td>– Scared of ants and toads</td>
<td></td>
</tr>
<tr>
<td>– Often mistaken for a centipede</td>
<td></td>
</tr>
</tbody>
</table>
### Work Time (continued)

<table>
<thead>
<tr>
<th>C. Independent Practice: Developing a Character Profile for the Expert Group Animal (20 minutes)</th>
<th>Meeting Students' Needs</th>
</tr>
</thead>
</table>
| **• Ask students to take a moment to get their materials organized:**  
  – Animal Defenses research journal (from Unit 1)  
  – Expert Group Animal research journal (from Unit 2)  
  – *research texts.*  
**• Distribute the Character Profile graphic organizer to each student.**  
**• Remind students to read through their research before they complete their profiles.**  
**• Circulate to support students and helping them to cite their sources. If some students finish early, consider these options:**  
  – Encourage them to reread their texts or notes to add details.  
  – Ask them to pair up to share and give informal feedback.  
  – Ask them to draw a character sketch to help them visualize their character. | **• To further support students, you might have them work in their small expert groups or with a partner. You may also pull a small group for more direct instruction and support.**  
**• Drawing can help support visual learners.** |
## Closing and Assessment

### A. Sharing (5 minutes)
- Have students meet with a partner from a different expert group and share their profiles. Ask students to give each other one specific piece of praise:
  * “What do you think is most interesting about your partner’s character? Why?”
- Have students share their thought on the following questions with a partner:
  * “What helped you create your character?”
  * “What was difficult about creating your character?”
- Cold call a few students to share.
- Distribute “Powerful Polly” and preview the homework as needed.

## Meeting Students’ Needs

### Homework
- Read “Powerful Polly” for the gist.
Teacher Directions: Write the following on chart paper to create this anchor chart.

Author’s Chair Celebration

In groups of three or four:
1. Find a space where your group can sit in a circle.
2. Select an author to read and reflect first.
3. Authors should read their piece to the group and share their thinking on the following questions:
   * “What are you most proud of in this piece?”
   * “What was your biggest challenge and how did you handle it?”
4. Group members should listen as the author reads and reflects and then take a moment to write the author’s name and one piece of specific praise on a sticky note. (Hold on to your sticky notes until everyone has read their pieces.)
5. Take turns so that each author has a chance to read and reflect and listeners have written praise for each author.
6. Exchange sticky notes with praise so that authors can read.
7. Congratulate each other on the publication of your work.
Choose-Your-Own-Adventure Narrative Rubric

**Learning Target:**
I can write a choose-your-own-adventure narrative about animal defense mechanisms. (W.4.3)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Meets</th>
<th>Partially Meets</th>
<th>Does Not Meet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideas</strong></td>
<td>Incorporates many facts and details from research on my animal and its defense mechanisms.</td>
<td>Incorporates some facts and details from research on my animal and its defense mechanisms.</td>
<td>Incorporates few facts and details from research on my animal and its defense mechanisms.</td>
</tr>
<tr>
<td>I can create a narrative based on facts and details from my research about how my animal defends itself.</td>
<td>I strategically use dialogue and descriptions to show what a character is feeling, thinking, and how they interact with others.</td>
<td>I use dialogue and descriptions to show what a character is feeling, thinking, or how they interact with others.</td>
<td>I use little or no dialogue in my narrative.</td>
</tr>
</tbody>
</table>
### Choose-Your-Own-Adventure Narrative Rubric

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Meets</th>
<th>Partially Meets</th>
<th>Does Not Meet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Word Choice</strong></td>
<td>I use at least four words from my research in my descriptions.</td>
<td>I use at least three words from my research in my descriptions.</td>
<td>I use two or fewer words from my research in my descriptions.</td>
</tr>
<tr>
<td></td>
<td>I use at least three sensory details in my descriptions.</td>
<td>I use one or two sensory details in my descriptions.</td>
<td>I did not use sensory details in my descriptions.</td>
</tr>
<tr>
<td>I can use sensory details and vocabulary from my research to describe</td>
<td>I include at least three temporal words or phrases to show the</td>
<td>I include two temporal words or phrases to show the</td>
<td>I include one or no temporal words or phrases to show the sequence of events</td>
</tr>
<tr>
<td>my animal and its defense mechanisms in my narrative.</td>
<td>sequence of events in my narrative.</td>
<td>sequence of events in my narrative.</td>
<td>in my narrative.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Choose-Your-Own-Adventure Narrative Rubric

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Meets</th>
<th>Partially Meets</th>
<th>Does Not Meet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization</strong></td>
<td>I can organize events in an order that makes sense in my narrative.</td>
<td>My narrative may be missing one or two of the following: an introduction, rising action, problem, solution, and conclusion.</td>
<td>My narrative is missing three or more of the following: an introduction, rising action, problem, solution, and conclusion.</td>
</tr>
<tr>
<td></td>
<td>My narrative includes an introduction, rising action, problem, solution, and conclusion.</td>
<td>The events of my narrative are in an order that somewhat makes sense to the reader.</td>
<td>The events of my narrative are not in a logical order and do not make sense to the reader.</td>
</tr>
<tr>
<td></td>
<td>The events of my narrative unfold in a logical order that makes sense to the reader.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>I can write an introduction that establishes a situation by introducing the characters, setting, and plot of my narrative.</strong></td>
<td>My introduction establishes a situation by introducing the characters, setting, and plot of my narrative.</td>
<td>My introduction somewhat establishes a situation by introducing one or two of the following: characters, setting, or plot of my narrative.</td>
<td>My introduction does not establish a situation or introduce the characters, setting, or plot of my narrative.</td>
</tr>
<tr>
<td><strong>I can write a conclusion that resolves the problem and brings the story to a close.</strong></td>
<td>My conclusion resolves the problem and brings the story to a close.</td>
<td>My conclusion somewhat resolves the problem and brings the story to a close.</td>
<td>My conclusion does not resolve the problem or bring the story to a close.</td>
</tr>
</tbody>
</table>
### Choose-Your-Own-Adventure Narrative Rubric

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Meets</th>
<th>Partially Meets</th>
<th>Does Not Meet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can use correct spelling in my writing.</td>
<td>I have no misspelled words in my writing. This includes homophones and common affixes.</td>
<td>I have misspelled some words.</td>
<td>I have many misspelled words.</td>
</tr>
<tr>
<td>I can use correct conventions in my writing.</td>
<td>I correctly use capitalization in my writing.</td>
<td>I have some mistakes with my capitalization and punctuation.</td>
<td>I have many mistakes in capitalization and punctuation.</td>
</tr>
<tr>
<td></td>
<td>I correctly use commas and quotation marks to identify speech and quotations from a text.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I can choose correct punctuation for ending my sentences.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Character Profile Graphic Organizer

**Name:**

**Date:**

<table>
<thead>
<tr>
<th>Physical Description</th>
<th>Personality Traits</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Basic features—ex., size, color, number of legs, tail, etc. and special features—ex., sticky tongue, double-jointed legs, etc.)</td>
<td>(Character traits—ex., serious, humorous, rebellious, follower, leader, etc. How does your animal deal with problems?)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Daily Life / Behaviors</th>
<th>Family / Habitat Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(What does your animal do every day? What is its “role” in its group? Ex., gathers food, builds shelter, cares for young, protects others, etc.)</td>
<td>(Who does your animal live with? Where does it live?)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fun Facts</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Favorites, etc.)</td>
<td></td>
</tr>
</tbody>
</table>
# Millipede Character Profile Graphic Organizer

(Completed, for Teacher Reference)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
</tr>
</thead>
</table>

## Physical Description
(Basic features—ex., size, color, number of legs, tail, etc. and special features—ex., sticky tongue, double-jointed legs, etc.)

- 60 body segments
- 120 legs
- hard exoskeleton
- long and skinny

## Personality Traits
(Character traits—ex., serious, humorous, rebellious, follower, leader, etc. How does your animal deal with problems?)

- curious
- hard-working
- cautious

## Daily Life/Behaviors
(What does your animal do every day? What is its “role” in its group? Ex., gathers food, builds shelter, cares for young, protects others, etc.)

- looks for food—leaves
- walks around

## Family/Habitat Description
(Who does your animal live with? Where does it live?)

- lives outdoors on the damp forest floor
- lives by a stream

## Fun Facts
(Favorites, etc.)

- favorite sound is birds chirping
- favorite color is brown

## Other

- scared of ants and toads
- often mistaken for a centipede

## Sources

*Venom*
*Animal Behavior: Animal Defenses*
It was a warm tropical morning. Polly the pufferfish swam slowly along in her underwater home near a colorful coral reef. She watched as a sea anemone gently waved in the current, then glanced around looking for a spot to rest. The salty ocean water warmed her round body and small fins. She began to relax.

On the other side of the reef, a tiger shark also watched the sea anemone and the floating pufferfish. “That fish looks like tasty prey,” the predator thought to himself. “It’s just floating along, and I don’t think it even notices I’m here. I’m going to sneak up and eat it.” The shark swam a little closer.

A moment later, Polly floated by the waving sea anemone. Suddenly, she noticed something striped on the other side, moving her way. “A tiger shark!” she thought. Her spines trembled with fear. That was her worst enemy! She had to do something to protect herself from being eaten, and fast!

At first, she considered trying to swim away, but she knew the shark was much too fast. In a panic she thought, “What should I do? How can I defend myself?”

What should Polly do?

Choice #1
If Polly inflates her body, turn to page 4

Choice #2
If Polly uses her spines, turn to page 5

This text was written for instructional purpose by Expeditionary Learning using the following sources:


*Venom* by Marilyn Singer. 2007. Darby Creek Publishing. Plain City, OH.
Then the tiger shark swam closer. Thinking quickly, Polly swallowed the ocean water into her stomach until it was completely full. Her stretchy skin and stomach inflated until she was huge—three times her normal size!

“What IS that?” the tiger shark thought. “What happened to that fish? How did it get so big?”

Polly knew she looked frightening to the tiger shark now that she was so much bigger. She also knew she was way too big for the shark to swallow her, and the shark knew it too.

“There’s no way I can eat a fish that big. It won’t fit down my throat!” the shark thought. He turned back around, swimming away from Polly and looking for something else to eat.

Polly was safe!
The tiger shark swam closer. Polly inflated her body quickly, and her prickly spines shined in the water.

“What IS that?” the tiger shark thought. “What is all over its body?”

Polly knew she looked intimidating to the tiger shark with her prickly spines.

Still the shark came closer. One of Polly’s spines pricked the shark’s nose.

“Ouch! That hurt! I don’t want to eat that thing,” the shark thought to himself. The shark turned around, looking back at the coral reef for something else to eat.

Polly was safe!
Grade 4: Module 2B: Unit 3: Lesson 4
Planning Ideas: Developing a Plot for the Millipede Choose-Your-Own-Adventure Narrative
Developing a Plot for the Millipede Choose-Your-Own-Adventure Narrative

### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can establish a situation. (W.4.3a)
- I can develop the topic with facts, definitions, details, and quotations. (W.4.2b)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can determine the characteristics of a narrative.</td>
<td>• Analyzing a Narrative note-catcher</td>
</tr>
<tr>
<td>• I can organize a plot for a narrative using events based on research of my animal and its defense mechanisms.</td>
<td>• Millipede Narrative Planning graphic organizer</td>
</tr>
</tbody>
</table>
# Agenda

<table>
<thead>
<tr>
<th>Opening</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Engaging the Writer: Sketching (5 minutes)</td>
<td>• Students start the lesson by revisiting their sketches of their expert group animal from Unit 2 using one of its defense mechanisms. In this unit, they create a new sketch highlighting a different defense mechanism of their expert group animal. Students include both sketches in the final performance task, so the defense mechanisms highlighted should be the ones written about for the informative page in Unit 2 and the two choices of the choose-your-own-adventure narrative in this unit.</td>
</tr>
<tr>
<td>B. Reviewing Learning Targets (5 minutes)</td>
<td>• In this lesson, students reread “Powerful Polly” and study it as a mentor text: as an example of a choose-your-own-adventure narrative that students can use as a model as they write their own research-based narratives.</td>
</tr>
<tr>
<td>Work Time</td>
<td>• In this lesson, students practice planning a narrative about the millipede by using a Narrative Planning graphic organizer. Then in Lesson 5, they practice the same process for their narratives about their expert group animals. In Lesson 6, they practice writing a narrative about the millipede based on their plans. These lessons provide guided practice to prepare students to write a narrative about their own expert group animal for the mid-unit assessment.</td>
</tr>
<tr>
<td>A. Examining Organization of Narratives (20 minutes)</td>
<td>• The Narrative Planning graphic organizer is similar to the Planning graphic organizer used in Module 1, which helps students write strong paragraphs, and to the graphic organizer used in Unit 2 to write their informative pages. Students will be familiar with the format of the graphic organizer, but it has been modified to support students in writing multiple paragraphs to form a narrative. This new use will be explicitly taught in this lesson.</td>
</tr>
<tr>
<td>B. Modeling: Planning the Millipede Narrative (10 minutes)</td>
<td>• Only Choice #1 on the planning organizer has a suggested answer key for teacher reference because this is the only one filled out as a whole group. Choice #2 is filled out by students independently, so there is no answer key for teacher reference.</td>
</tr>
<tr>
<td>C. Partner Work: Planning the Millipede Narrative (15 minutes)</td>
<td>• In advance:</td>
</tr>
<tr>
<td>Closing and Assessment</td>
<td>– Display Performance Task anchor chart.</td>
</tr>
<tr>
<td>A. Sharing (5 minutes)</td>
<td>– Prepare chart paper for Characteristics of Narratives and Steps for Planning and Drafting My Narrative anchor charts (see supporting materials).</td>
</tr>
<tr>
<td>Homework</td>
<td>– Organize Unit 1 and Unit 2 research materials and modeled notes for use in modeling with the Millipede Character Profile graphic organizer in this lesson.</td>
</tr>
<tr>
<td>A. Continue reading your independent reading book for this unit.</td>
<td></td>
</tr>
</tbody>
</table>
Planning Ideas:
Developing a Plot for the Millipede Choose-Your-Own-Adventure Narrative
### Lesson Vocabulary
- organize, characters, setting, description, dialogue, plot, introduction, rising action, problem, solution, conclusion

### Materials
- Expert Group Animal research journals (from Unit 2, Lesson 2; one per student and one to display)
- Sketch page (page 12 of Expert Group Animal research journal; one per student and one to display)
- New Sketch page (one per student and one to display; included in supporting materials of this lesson)
- Analyzing a Narrative note-catcher (one per student and one to display)
- “Powerful Polly” pufferfish narrative (from Lesson 3; one per student and one to display)
- Equity sticks
- Characteristics of Narratives anchor chart (new; co-created during Work Time A)
- Performance Task anchor chart (from Unit 1, Lesson 1)
- Millipede Narrative Planning graphic organizer (one per student and one to display)
- Millipede Narrative Planning graphic organizers (completed, for teacher reference)
- Millipede Character Profile graphic organizer (from Lesson 3)
- Document camera
- Steps for Planning and Drafting My Narrative anchor chart (new; co-created during Closing)
### Opening

**A. Engaging the Writer: Sketching (5 minutes)**
- Ask students to turn to the Sketch page from Unit 2 on page 12 of their Expert Group Animal research journals. Remind students that this sketch shows their expert group animal using one of its defense mechanisms. Tell students they will include this sketch in their final performance task.
- Explain to students that during this unit, they will work on a new sketch showing their expert group animal using a different defense mechanism. Tell students that each of these defense mechanisms will be the choices presented to their reader in their choose-your-own-adventure narrative.
- Distribute a new Sketch page to each student. Tell students to create a new sketch in the First Draft box of their animal using another one of its defense mechanisms.
- Circulate and support as needed. If necessary, prompt students by asking: “What defense mechanism are you highlighting in this sketch?” or “How can you show a defense mechanism of your animal in a sketch?”
- Remind students that they will be sketching, revising their sketches, and adding labels and captions throughout the unit.

**B. Reviewing Learning Targets (5 minutes)**
- Read the learning targets:
  - “I can determine the characteristics of a narrative.”
  - “I can organize a plot for a narrative using events based on research of my animal and its defense mechanisms.”
- Have students turn to a partner and explain in their own words what the phrase based on research means. Have pairs share and clarify as necessary.
- Explain that they will hear the phrase based on research a lot over the next few days. In the previous lesson they learned about creating characters based on their research. For the next few lessons, they will focus on the following learning targets: “I can organize a plot for a narrative using events based on research of my animal and its defense mechanisms,” and “I can create a narrative based on facts and details from my research.”
- Discuss the meaning of the word organize and explain that today students will learn to plan events that will help them to create plots and descriptions for their stories based on their research of their expert group animal.

### Meeting Students’ Needs

- Discussing and clarifying the language of learning targets helps build academic vocabulary.
### A. Examining Organization of Narratives (20 minutes)

- Display and distribute the **Analyzing a Narrative note-catcher.** Tell students that you are going to read a text aloud to them and that you would like them to analyze the *narrative* using this note-catcher. Remind them that a narrative is another word for a story.

- Explain that this narrative is an example of a story told in the choose-your-own-adventure format, but they will focus on reading just the first choice so they can determine the elements of narratives in general. Go on to explain that to do this, they will listen and take notes on their note-catchers, noting what they notice and wonder about the elements of a narrative.

- Tell students that they will listen as you read aloud the narrative **“Powerful Polly”** the first time. Remind them that they read it for homework, so they should be familiar with it. Explain that using this model will help them to determine what to include in their own narratives and how to organize them. Read the text aloud using Choice #1. This will help students to focus on the general component parts of a narrative and not to be confused by the unique structure of the choose-your-own-adventure format.

- Next, invite students to take notes on what they notice and wonder about this narrative in their note-catchers. Remind them that listening and taking notes is something they have done before when learning about animal defense mechanisms in Units 1 and 2.

- At this point, suggest all student suggestions that are logical “notices” or “wonders.” They will get more precise later.

- Read the text aloud a second time. Pause briefly after reading the first paragraph to model how students might take notes: “I notice that we meet the character, Polly the pufferfish, in the first part of the story. I wonder if this is where narratives typically introduce a main character?”

- Next ask students whether they notice anything else about the beginning as you reread the first paragraph aloud to them. Ask for a few volunteers to share their notes. Listen for students to notice that the reader also learns where the story is happening and what the character is doing.

- Continue reading, pausing at the end of each paragraph so students can take notes.

- Have students share with a partner the notes they captured for each section. Use **equity sticks** to call on students to share.

- Begin the **Characteristics of Narratives anchor chart.** Underneath the title, write, “A narrative usually has ...” Ask:
  * “What did you notice about narratives after listening to the example?”

- Give students a moment to think and review their notes. Then use equity sticks to select students to share their thinking.

### Meeting Students’ Needs

- To support ELL students in this lesson, consider having them take out a copy of this text from their writing folders and read along. Another support could be to have them discuss their thinking with a partner after listening to the text, then record their notes.

- Consider adding visuals to the Characteristics of Narratives anchor chart to help students understand the different components. This will be especially helpful when recording information about the structure of a typical plot (e.g., a story line diagram showing rising action, problem, solution and conclusion).
### Work Time (continued)

- Help students to generalize what they noticed and took notes about by giving them the vocabulary associated with narrative components listed below.

- Students may notice the main features of narratives. Record each of these on the chart and define as you go:
  - *Characters*: the individuals in a story
  - *Setting*: place and time of a story
  - *Plot*: the events in the story, what happens to the characters

- Note: Do NOT elaborate on the parts of the plot, as that is discussed in depth next. DO leave space under this term and its definition, so the class can add more information about plot in the next portion of the lesson (see the anchor chart example in the supporting materials of this lesson).

- Then add additional features students may not have noticed, defining these as well:
  - *Dialogue*: the speech and conversation of characters in a story
  - *Sensory details*: words authors use in a story to create mental images in their readers’ minds
  - *Transitional words*: words used by authors to show the order of events and passage of time

- Tell students that you are going to read the text aloud to them a third time and this time you would like them to analyze the plot. Ask:
  *“What is the plot of a narrative?”*

- Listen for responses such as: “The plot is the problem in the story,” or “The events of the story make up the plot.” Clarify if necessary so students know the definition to be the sequence of events in a story, including a problem faced by the character and how it is solved.

- Ask students to flip their note-catchers over and point out the word “plot” and its definition on the top of their note-catcher, and clarify the meaning of this word if necessary.

- Explain that they will be listening to the example narrative again and that this time they will listen for how the events of the narrative are organized from beginning to end to analyze the plot. To do this they will listen and take notes in the four categories of their note-catchers. Review each category and clarify as needed.

- Read “Powerful Polly” a third time, again reading only the first choice. This will help students to focus on the general structure of a plot and not to become confused by the unique structure of the choose-your-own-adventure format.

- Pause briefly at the end of each paragraph so students can take notes.
### Work Time (continued)

- Have students share with a partner the notes they captured for each section. Use equity sticks to call on students to share. Complete the note-catcher with the class. Explain the basic plot structure of most narratives:
  
  "Plots of most basic stories follow this pattern: introduction, rising action, problem, solution, and conclusion."

- Add these terms with brief descriptors to the Characteristics of Narratives anchor chart under “plot,” similar to the following:
  
  - Introduction: sets the stage for the reader
  - Rising action: establishes a situation
  - Problem: what the characters are trying to solve
  - Solution: how the characters solve the problem
  - Conclusion: how the narrative is wrapped up

- Go on to explain that the choose-your-own-adventure format follows this same pattern but has more than one solution and conclusion.
### B. Modeling: Planning the Millipede Narrative (10 minutes)

- Tell students that now that they have a clearer picture of how the plot of a narrative is organized, they will practice planning a plot using the millipede. Explain that first they will focus on planning the rising action and problem as a class, and then they will practice planning the solution and conclusion with a partner.

- Display the **Performance Task anchor chart**. Display and distribute the **Millipede Narrative Planning graphic organizer** to each student. Remind students that they worked with a similar graphic organizer during Module 1, and in Unit 2 when they wrote their informative pages. Reassure them that today they will be able to practice using this graphic organizer to write multiple paragraphs by first helping them plan a narrative about the millipede.

- Tell students that the first step is to collect information for each part of the graphic organizer. Explain that students will draw information from four different places: the prompt, their research notes, their character profiles, and their imaginations.

- Model reading the prompt and the **Millipede Character Profile graphic organizer** (from Lesson 3) and completing the first two boxes of the Millipede Narrative Planning graphic organizer (the Introductory Paragraph and the Problem Paragraphs). Explain that these paragraphs introduce the character, the situation/rising action, and the problem in the story.

- Show students where to list their sources and model this as well. See the **Millipede Narrative Planning graphic organizer (completed; for teacher reference)**. Ask students to record notes along with you.
## Work Time

### C. Partner Work: Planning the Millipede Narrative (15 minutes)

- Display your research notes using the **document camera**. Tell students that you would like them to work with a partner to complete the next part of the graphic organizer.
- Explain to students that first they will need to think about the two choices for the reader to choose from in the adventure. Remind students that the *reader* chooses which defense mechanism the millipede will use. Remind students that they can use their imaginations but that the choices must also be based on their research. Give students several minutes to discuss with their partners the two choices they will use for the millipede. Use equity sticks to call on students to share out their choices.
- Invite students to record their choices in the Resolution Paragraph box for each choice, after the questions “How does my character solve the problem? What defense mechanism is used?”
- Next, explain to students that they will plan the details of the Resolution and Concluding Paragraphs for Choice #1 only. Tell students to leave the Choice #2 and Vocabulary boxes empty for now. The result will be partners creating variations on the same story.
- Tell student to use your research notes and their imaginations to plan the last two paragraphs.
  * “What will the millipede do when he notices a predator approaching?”
  * “What will be the result of his actions?”
  * “How will the story end?”
- Encourage students to be creative but to keep their plans based on facts and details from their research. Tell them you are excited to see how many different endings this story will have.
- Be sure students know that they get to think and talk in pairs but that each student must complete his or her own graphic organizer about the millipede.
- Give students 10 minutes to work. Circulate to confer and support as needed.

### Meeting Students’ Needs

- To further support some students, you may decide to make copies of your model research notes so they can have a copy in front of them as they work.
- Depending on the needs of your students, you may consider allowing students more choice for how they work during this time. Some students may prefer to work alone. You might decide to assign certain partners or allow students to choose.

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Planning Ideas:
Developing a Plot for the Millipede Choose-Your-Own-Adventure Narrative

Closing and Assessment

<table>
<thead>
<tr>
<th>A. Share (5 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Gather students whole group. Post the <strong>Steps for Planning and Drafting My Narrative anchor chart</strong>. Ask students to help you recall the steps they took when planning the narrative about the millipede. Record for students to reference when they plan their own narratives. Leave space at the bottom to add more steps in the next lesson. Steps for planning should include some version of the following:</td>
<td>• This Steps for Planning and Drafting My Narrative anchor chart will be used to help guide students during the mid-unit assessment when they draft their narratives.</td>
</tr>
<tr>
<td>– Gather resources: Performance Task Prompt, research journals, and Character Profile graphic organizer.</td>
<td>• Reviewing students’ narrative planning provides an opportunity to identify students who might need further help.</td>
</tr>
<tr>
<td>– Plan: Use above resources and your imagination to write notes planning each component of the Narrative Planning graphic organizer.</td>
<td></td>
</tr>
<tr>
<td>• Collect students’ Millipede Narrative Planning graphic organizers.</td>
<td></td>
</tr>
</tbody>
</table>

Homework

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Continue reading your independent reading book for this unit.</td>
</tr>
</tbody>
</table>
Grade 4: Module 2B: Unit 3: Lesson 4
Supporting Materials
Criteria for Sketching:
It is based on your research this means...
- It has realistic coloring, shape, size, and habitat
- It has a descriptive and accurate caption that uses vocabulary from your research

<table>
<thead>
<tr>
<th>First Draft</th>
<th>Second Draft:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caption:</td>
<td>Caption:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Draft</th>
<th>Fourth Draft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caption:</td>
<td>Caption:</td>
</tr>
</tbody>
</table>
## What do you notice and wonder about narratives?

<table>
<thead>
<tr>
<th>I notice</th>
<th>I wonder</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Name: 
Date: 

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How are the events of a narrative organized from beginning to end?

**Plot:** The sequence of events in a story.

<table>
<thead>
<tr>
<th>Introduction and Rising Action</th>
<th>The Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introducing the character, setting, and major event:</td>
<td>What problem does the character face?</td>
</tr>
<tr>
<td>Details:</td>
<td>Details:</td>
</tr>
<tr>
<td>▪ Who is the character?</td>
<td>▪</td>
</tr>
<tr>
<td>▪ Where is the story set?</td>
<td>▪</td>
</tr>
<tr>
<td>▪ What is happening?</td>
<td>▪</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Solution</th>
<th>The Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does the character solve the problem?</td>
<td>What is the result of the character’s actions?</td>
</tr>
<tr>
<td>Details:</td>
<td>How does it end?</td>
</tr>
<tr>
<td>▪</td>
<td>▪</td>
</tr>
<tr>
<td>▪</td>
<td>▪</td>
</tr>
<tr>
<td>▪</td>
<td>▪</td>
</tr>
</tbody>
</table>
How are the events of a narrative organized from beginning to end?

**Plot:** The sequence of events in a story.

<table>
<thead>
<tr>
<th>Introduction and Rising Action</th>
<th>The Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introducing the character, setting, and major event:</td>
<td>What problem does the character face?</td>
</tr>
<tr>
<td>Details:</td>
<td>A tiger shark sees Polly and wants to eat her.</td>
</tr>
<tr>
<td>- Who is the character? <strong>Polly the pufferfish</strong></td>
<td></td>
</tr>
<tr>
<td>- Where is the story set? <strong>A tropical coral reef</strong></td>
<td>Details:</td>
</tr>
<tr>
<td>- What is happening? <strong>Polly is relaxing by the coral.</strong></td>
<td>- The shark swims closer.</td>
</tr>
<tr>
<td></td>
<td>- Polly notices the shark.</td>
</tr>
<tr>
<td></td>
<td>- Polly panics, because she doesn’t know what to do.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Solution</th>
<th>The Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does the character solve the problem? <strong>Polly inflates to three times her size.</strong></td>
<td>What is the result of the character's actions?</td>
</tr>
<tr>
<td>Details:</td>
<td>The shark decides to swim away.</td>
</tr>
<tr>
<td>- Polly swallows water.</td>
<td>How does it end?</td>
</tr>
<tr>
<td>- Her skin stretches and she grows bigger.</td>
<td>Polly is safe.</td>
</tr>
<tr>
<td>- The shark wonders how she got so big.</td>
<td></td>
</tr>
</tbody>
</table>

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Teacher Directions: Write the following on chart paper to create this anchor chart.

Characteristics of Narratives

A narrative usually has ...

characters: the individuals in a story
setting: place and time of a story
plot: the events in the story, what happens to the characters
  – introduction: sets the stage for the reader
  – rising action: establishes a situation
  – problem: what that the characters are trying to solve
  – solution: how the characters solve the problem
  – conclusion: how the narrative is wrapped up
dialogue: the speech and conversation of characters in a story
sensory details: words authors use in a story to create mental images in their readers’ minds
transitional words: words used by authors to show the order of events and passage of time
## Millipede Narrative Planning Graphic Organizer

### How will the events of my narrative be organized from beginning to end?

<table>
<thead>
<tr>
<th><strong>Introductory Paragraphs</strong></th>
<th><strong>Problem Paragraph(s)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce the character, situation, and setting:</td>
<td>What problem arises?</td>
</tr>
<tr>
<td>Details:</td>
<td>Details:</td>
</tr>
<tr>
<td>‧ Who is my character? What is he or she like?</td>
<td>‧</td>
</tr>
<tr>
<td>‧ Where is the story set?</td>
<td>‧</td>
</tr>
<tr>
<td>‧ What is happening?</td>
<td>‧</td>
</tr>
</tbody>
</table>
# Millipede Narrative Planning Graphic Organizer

## CHOICE #1

<table>
<thead>
<tr>
<th>Resolution Paragraph</th>
<th>Concluding Paragraph</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does my character solve the problem? What defense mechanism is used?</td>
<td>What is the result of my character’s actions?</td>
</tr>
</tbody>
</table>

**Details:**
- 
- 
- 

**Concluding Paragraph**
- How does it end?

---

## CHOICE #2

<table>
<thead>
<tr>
<th>Resolution Paragraph</th>
<th>Concluding Paragraph</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does my character solve the problem? What defense mechanism is used?</td>
<td>What is the result of my character’s actions?</td>
</tr>
</tbody>
</table>

**Details:**
- 
- 
- 

**Concluding Paragraph**
- How does it end?

---

**My Sources:** List any sources you used in planning your informative piece.

**Vocabulary from my research to be used:**
How will the events of my narrative be organized from beginning to end?

<table>
<thead>
<tr>
<th><strong>Introductory Paragraphs</strong></th>
<th><strong>Problem Paragraph(s)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce the character, situation, and setting:</td>
<td>What problem arises?</td>
</tr>
<tr>
<td>Details:</td>
<td>Details:</td>
</tr>
<tr>
<td>- Who is my character? What is he or she like?</td>
<td>- The toad spots the millipede from across the stream.</td>
</tr>
<tr>
<td>- Marty the millipede</td>
<td>- He hops closer to the millipede.</td>
</tr>
<tr>
<td>- curious, hard-working, and cautious</td>
<td>- He makes a loud “ribbit” noise.</td>
</tr>
<tr>
<td>- hard exoskeleton</td>
<td></td>
</tr>
<tr>
<td>- long and skinny</td>
<td></td>
</tr>
<tr>
<td>- 60 body segments and 120 legs</td>
<td></td>
</tr>
<tr>
<td>- favorite sound is birds chirping and favorite color is brown</td>
<td></td>
</tr>
<tr>
<td>- scared of ants and toads</td>
<td></td>
</tr>
<tr>
<td>- often mistaken for a centipede</td>
<td></td>
</tr>
<tr>
<td>- Where is the story set?</td>
<td></td>
</tr>
<tr>
<td>- the forest floor</td>
<td></td>
</tr>
<tr>
<td>- by a stream</td>
<td></td>
</tr>
<tr>
<td>- What is happening?</td>
<td></td>
</tr>
<tr>
<td>- The millipede is eating a leaf.</td>
<td></td>
</tr>
</tbody>
</table>

**CHOICE #1**

<table>
<thead>
<tr>
<th><strong>Resolution Paragraph</strong></th>
<th><strong>Concluding Paragraph</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>How does my character solve the problem?</td>
<td>What is the result of my character’s actions?</td>
</tr>
<tr>
<td>What defense mechanism is used?</td>
<td>- The frog gets confused. Where did the millipede go? All he sees are a bunch of rocks.</td>
</tr>
<tr>
<td>- He rolls into a ball.</td>
<td></td>
</tr>
<tr>
<td>Details:</td>
<td></td>
</tr>
<tr>
<td>- Hears the frog first</td>
<td></td>
</tr>
<tr>
<td>- Then sees how close it is</td>
<td></td>
</tr>
<tr>
<td>- Gets scared</td>
<td></td>
</tr>
<tr>
<td>- Rolls into a ball</td>
<td></td>
</tr>
<tr>
<td>- The ball looks like a pebble by the stream.</td>
<td></td>
</tr>
<tr>
<td>How does it end?</td>
<td></td>
</tr>
<tr>
<td>- The frog gives up and goes looking for something else to eat. Marty is safe!</td>
<td></td>
</tr>
</tbody>
</table>
Steps for Planning and Drafting My Narrative Anchor Chart
(For Teacher Reference)

Teacher Directions: Ask students to help you recall the steps they took when planning the narrative about the millipede. Record for students to reference when they plan their own narratives. Leave space at the bottom to add more steps in the next lesson. Steps for planning should include some version of the following:

Steps for Planning and Drafting My Narrative

1) Gather resources: Performance Task Prompt, research journals, and Character Profile graphic organizer.

2) Plan: Use above resources and your imagination to write notes planning each component of the Narrative Planning graphic organizer.
Planning Ideas: Expert Group Animal Plot Development
**Planning Ideas:**
Expert Group Animal Plot Development

<table>
<thead>
<tr>
<th>Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I can establish a situation. (W.4.3a)</td>
<td></td>
</tr>
<tr>
<td>I can develop the topic with facts, definitions, details, and quotations. (W.4.2b)</td>
<td></td>
</tr>
</tbody>
</table>

**Supporting Learning Targets**

- I can organize a plot for a narrative using events based on research of my animal and its defense mechanisms.
- I can give kind, helpful, and specific feedback to my critique partner.
- I can critique the ideas of my writing partner’s Narrative Planning graphic organizer for the characteristics of a narrative. This means I can look for a plan for the characters, setting, introduction, rising action, problem, solution, and conclusion.

**Ongoing Assessment**

- Narrative Planning graphic organizer
### Agenda

1. **Opening**
   - A. Engaging the Writer: Sketching (5 minutes)
   - B. Reviewing Learning Targets (5 minutes)

2. **Work Time**
   - A. Reviewing Organization of Narratives (10 minutes)
   - B. Independent Practice: Reviewing Research and Planning the Expert Group Animal Narrative (20 minutes)
   - C. Peer Critique (15 minutes)

3. **Closing and Assessment**
   - A. Annotating Plans for Revision (5 minutes)

4. **Homework**
   - A. Revise your Narrative Planning graphic organizer based on your revision notes and feedback from your partner.

### Teaching Notes

- This lesson follows a similar flow to Lesson 4; students review the characteristics and organization of narratives and then plan their own narratives using the Narrative Planning graphic organizer. In Lesson 4, students looked at the Millipede Narrative Planning graphic organizer. Now, they use a new blank version of the Narrative Planning graphic organizer to plan their writing about their expert group animal.

- Students identify what the two choices are for their reader but only flesh out Choice #1 in this lesson. They will create the Choice #2 plan in Lesson 12, the lesson before the end of unit assessment. In the end of unit assessment, they will draft, revise, and edit Choice #2.

- Students use the Praise-Question-Suggest protocol to provide feedback to a partner on their plans. The focus of the critique is on the characteristics of narratives and organization of plot. This protocol was used in Module 1 and should be familiar to students.

- In advance:
  - Display Characteristics of Narratives, Performance Task, Steps for Planning and Drafting My Narrative, Critique Protocol and Steps for Revising My Writing anchor charts.
  - Prepare chart paper for Questions for Critique anchor chart (see supporting materials).
  - Organize students in pairs to critique each other’s writing.
  - Review the Praise-Question-Suggest protocol (Appendix 1). Students will have used this protocol before but will need support today focusing specifically on the Question step in the process.
  - Ask a student if he or she would be willing to share his or her writing to help model the Praise-Question-Suggest protocol.

- Post: Learning targets.
### Planning Ideas:
Expert Group Animal Plot Development

#### Lesson Vocabulary
- critique, specific, feedback

#### Materials
- New Sketch page (from Lesson 4; one per student and one to display;)
- Document camera
- Equity sticks
- Characteristics of Narratives anchor chart (from Lesson 4)
- “Powerful Polly” pufferfish narrative (from Lesson 3; one per student and one to display)
- Performance Task anchor chart (from Unit 1, Lesson 1)
- Steps for Planning and Drafting My Narrative anchor chart (from Lesson 4)
- Expert Group Animal research journals (from Unit 2, Lesson 2; one per student and one to display)
- Web Page Research Guide (page 2-8 of Expert Group Animal research journals; used in Unit 2, Lessons 2 and 3)
- Research note-catchers (page 9-11 of Expert Group Animal research journals; used in Unit 2, Lessons 4 and 5)
- Narrative Planning graphic organizer (one per student and one to display)
- Critique Protocol anchor chart (from Module 1, Unit 1, Lesson 7)
- Questions for Critique anchor chart (new; co-created during Work Time C)
- Millipede Narrative Planning graphic organizer (from Lesson 4; one to display; see Teaching Notes)
- Sticky notes (several per student)
- Green colored pencils (one per student)
- Steps for Revising My Writing anchor chart (from Unit 2, Lesson 10)
**Opening**

<table>
<thead>
<tr>
<th>A. Engaging the Writer: Sketching (5 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Invite students to locate their New Sketch page (from Lesson 4). Explain to students that they will be revising</td>
<td></td>
</tr>
<tr>
<td>their sketches from Lesson 4 to add detail and labels.</td>
<td></td>
</tr>
<tr>
<td>• Tell students to draw at least one detail and three labels for their sketch to make it clearer to the viewer</td>
<td></td>
</tr>
<tr>
<td>what they are looking at.</td>
<td></td>
</tr>
<tr>
<td>• Circulate and support as needed. If necessary, prompt students by asking: “What detail can you add to make your</td>
<td></td>
</tr>
<tr>
<td>sketch clearer?” or “What labels can you add to help your reader better understand the sketch?”</td>
<td></td>
</tr>
<tr>
<td>• Remind students that they will be sketching, revising their sketches, and adding labels and captions</td>
<td></td>
</tr>
<tr>
<td>throughout the unit.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Reviewing Learning Targets (5 minutes)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Review the following learning target:</td>
<td></td>
</tr>
<tr>
<td>* “I can organize a plot for a narrative using events based on research of my animal and its defense</td>
<td></td>
</tr>
<tr>
<td>mechanisms.”</td>
<td></td>
</tr>
<tr>
<td>• Tell students that they have practiced planning a narrative using the millipede, and now they will be using</td>
<td></td>
</tr>
<tr>
<td>their own expert group animal. Tell them that today they will focus on creating a plan for their</td>
<td></td>
</tr>
<tr>
<td>narratives based on their research.</td>
<td></td>
</tr>
<tr>
<td>• Post and read aloud the following learning targets:</td>
<td></td>
</tr>
<tr>
<td>* “I can give kind, helpful, and specific feedback to my critique partner.”</td>
<td></td>
</tr>
<tr>
<td>* “I can critique the ideas of my writing partner’s Narrative Planning graphic organizer for the</td>
<td></td>
</tr>
<tr>
<td>characteristics of a narrative. This means I can look for a plan for the characters, setting,</td>
<td></td>
</tr>
<tr>
<td>introduction, rising action, problem, solution, and conclusion.”</td>
<td></td>
</tr>
<tr>
<td>• Ask students what they know already about these targets. Give students a chance to talk with a partner about</td>
<td></td>
</tr>
<tr>
<td>their thinking and then cold call students using the equity sticks. Students may recall the critique</td>
<td></td>
</tr>
<tr>
<td>process from Module 1. Have them share what they recall.</td>
<td></td>
</tr>
<tr>
<td>• Then ask students to identify parts of the learning targets that are unfamiliar or confusing. Pay particular</td>
<td></td>
</tr>
<tr>
<td>attention to the meanings of the words specific and critique as you clarify the meaning of the</td>
<td></td>
</tr>
<tr>
<td>targets with students.</td>
<td></td>
</tr>
</tbody>
</table>
### A. Reviewing Organization of Narratives (10 minutes)

- Display the **Characteristics of Narratives anchor chart**.
- Invite students to Think-Pair-Share to review the elements of a narrative. Ask:
  * “Who are the characters in a narrative?”
  - Listen for responses such as: “The characters are the individuals in a story.”
- Ask:
  * “What is the setting of a narrative?”
  - Listen for responses such as: “The setting is the place and time of a story.”
- Ask:
  * “What is the plot of a narrative?”
  - Listen for responses such as: “The plot is the series of events of a story.”
- Ask:
  * “How are the introduction, rising action, problem, solution, and conclusion connected?”
  - Listen for responses such as: “The introduction sets the stage for the reader and the rising action establishes a situation. The problem is what the characters are trying to solve. The solution is how the characters solve it, and the conclusion is how the narrative is wrapped up.”
- Use equity sticks to call on students to share their responses.
- If necessary, use **"Powerful Polly"** as an example and invite students to identify the parts of the plot in this narrative.
- Ask the class to think about stories they have read or heard to see if they can identify these categories and share them with a partner. Have a few pairs share out.
### B. Independent Practice: Reviewing Research and Planning the Expert Group Animal Narrative (20 minutes)

<table>
<thead>
<tr>
<th>Work Time (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B. Independent Practice: Reviewing Research and Planning the Expert Group Animal Narrative (20 minutes)</strong></td>
</tr>
</tbody>
</table>

- Tell students that today they will plan the plot of their expert group animal narrative. Remind them that the conflict in their plot is the predator approaching the animal. Remind them that the conflict will keep the reader interested and wondering what will happen next. Remind them that the conflict will be resolved when they write the conclusion to their narratives later in this unit.

- Display and review the **Performance Task anchor chart**. Post the **Steps for Planning and Drafting My Narrative Writing anchor chart** from Lesson 4. Review the steps with students.

- Help students organize their materials. Ask students to get out their **Expert Group Animal research journals**. Tell students that the main documents they will need will be the **Close Reading Guide** (from Unit 2, Lessons 2 and 3) and **Research note-catchers** (from Unit 2, Lessons 4 and 5). Tell students that they may use any research in their journals but that you would like them to place these documents on top of their desks. Give students a few minutes to organize their materials.

- Distribute a blank copy of the **Narrative Planning graphic organizer** to each student. Remind them that they should leave the Choice #2 and Vocabulary boxes empty for now, but they should note what they are using for Choice #2 after the question, “How does my character solve the problem? What defense mechanism is used?” in the Resolution Paragraph box for Choice #2.

- Next ask students to review the graphic organizer and think about what information they may need to review from their notes to help them plan a narrative that is based on their research. Have them turn to a partner and share their next steps. You may consider giving them a sentence frame such as: “I need to write about __________, so I will look in my research for __________.” You could also provide students with a model: “I need to write about how my character uses one of its defense mechanisms, so I will look in my research for information about how it rolls into a ball to protect itself.” Circulate and listen for students who might need additional support when planning their narratives.

- Once students have shared their next step with a partner, tell them that they will have the next 20 minutes to plan their narratives. Tell them that you will be available to confer with them and support their planning.

- Direct their attention to the planning steps on the **Steps for Planning and Drafting My Narrative anchor chart**. Remind them to follow these steps to plan. Remind students to be creative but to remember that their narratives should be based on research about their animal and its defense mechanisms. If necessary, prompt by asking questions such as:

### Meeting Students’ Needs

- **For students who need support in the planning process**, consider one-on-one conferencing, pulling a small group, or having them work with a partner of a different expert group.
**Planning Ideas:**

**Expert Group Animal Plot Development**

### Work Time (continued)

- “What will your animal do when he notices a predator approaching?”
- “What will be the result of his actions?”
- “How will the story end?”

### C. Peer Critique (15 minutes)

- Tell students that they will be using the **Praise-Question-Suggest protocol** to give feedback to each other on their Narrative Planning graphic organizers. Remind students that they used this protocol in Module 1.
- Before the critique begins, review the main components of a successful critique on the **Critique Protocol anchor chart**. Remind the students that the following four points are crucial for success:
  - Be kind: Always treat others with dignity and respect. This means we never use words that are hurtful, including sarcasm.
  - Be specific: Focus on particular strengths and weaknesses, rather than making general comments like “It’s good” or “I like it.” Provide insight into why it is good or what specifically you like about it.
  - Be helpful: The goal is to positively contribute to the individual or the group, not to simply be heard. Echoing the thoughts of others or cleverly pointing out irrelevant details wastes time.
  - Participate: Peer critique is a process to support each other, and your feedback is valued!
- Briefly review the steps of that protocol:
  - Pair students. Tell them they are going to listen to their partners read their draft paragraph. Tell them to give feedback that is specific and kind.
  - Remind students that they can give feedback about the actual information their partner included or about how the draft paragraph sounds.
  - Point out two conversation stems on the Critique protocol anchor chart: “I like how you____,” and “Would you consider________?”
  - The author reads the paragraph. The listener gives one positive comment based on the requested area using the language, “I like how you_____.” The listener gives feedback based on the requested area: “Would you consider...?” The author responds: “Thank you [for] ... My next step will be....” Students then switch roles. Students should make corrections based on the feedback. If time allows, students should continue working or begin to revise their graphic organizers.
- Tell students that today, they are going to focus mostly on the Question step in the protocol. As a whole group, create a list of revision questions based on the characteristics of a narrative.

### Meeting Students’ Needs

- Critiques simulate the experiences students will have in the workplace and help build a culture of achievement in your classroom.
### Work Time (continued)

- Model by sharing a revision question yourself, such as: “Is there a plan for the plot that includes an introduction, rising action, problem, solution, and conclusion?” or “This setting doesn’t seem based on research. What research notes do you have that support it?” and add it to the new **Questions for Critique anchor chart**. Then invite students to share more questions they might ask.

- As a whole group, model the protocol process with the **Millipede Narrative Planning graphic organizer**. (Use a student’s actual graphic organizer if possible. If not, model using a graphic organizer of your own.)

- Ask the student volunteer to read his or her plan aloud, slowly, to the class. Ask the students to think about, but not say out loud, questions they might have.

- Direct students’ attention to the list of questions (Questions for Critique anchor chart) they generated. Ask the volunteer to read the plan out loud again.

- Invite students to ask the volunteer questions from the list. Then the volunteer writer responds or makes revisions while the class watches. Continue this question-and-answer process several times, until all students are clear on the process.

- Tell students that they will now do the same process in pairs. List the following instructions:
  - Listen to your partner read his or her draft paragraph. Give feedback that is specific and kind. (For example: “I like how you____,” and “Would you consider________?”)
  - The author responds: “Thank you [for] … My next step will be....”
  - Students then switch roles.
  - Students should make corrections based on feedback.
  - If time allows, students should continue working or begin to revise their graphic organizers.
  - Students will then break into pairs. Students take turns. The first student reads her or his plan, perhaps asking the partner to focus on a particular revision question or two they are struggling with. The listening student will document feedback on **sticky notes** and give to the presenter. Praise needs to be specific.
  - Next, ask questions and offer helpful suggestions. Feedback should relate to the revision questions created by the whole class.
  - Pairs continue this process until both students have shared their plans and received feedback/suggestions. Students thank each other.

### Meeting Students’ Needs

- **
### Closing and Assessment

<table>
<thead>
<tr>
<th>A. Annotating Plans for Revision (5 minutes)</th>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
</table>
| • Have students thank their partners and move to their own workspace. Be sure that every student has a **green colored pencil**. Post the new **Steps for Revising My Writing anchor chart**:
|   | • Use a different colored pencil to annotate each revision of students’ drafts in this unit. This will allow students to keep track of the focus of each revision. A different color will be used in subsequent lessons for each type of revision (e.g., ideas, organization). |
|   1. Choose the correct colored pencil. Today’s color is _____. | |
|   2. Decide where you are going to add a revision note based on feedback or new learning. | |
|   3. Write your revision note in the space above the notes you want to change. | |
|   4. Read through your entire plan and continue to record your revision notes. | |
|   5. Review your revision notes to be sure they make sense. | |
| • Tell them that you would like them to add notes to their Narrative Planning graphic organizers using the **green colored pencils** today. | |
| • Give students 5 minutes to add revision notes to their plans. Circulate to confer and support students as needed. | |
| • Explain to students that for homework, they should revise their plans based on their revision notes and their feedback from their partners during the critique in Work Time C. | |

### Homework

| • Revise your Narrative Planning graphic organizer based on your revision notes and feedback from your partner. | Meeting Students’ Needs |

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NYS Common Core ELA Curriculum • G4:M2B:U3:L5 • June 2014 • 9
How will the events of my narrative be organized from beginning to end?

<table>
<thead>
<tr>
<th><strong>Introductory Paragraphs</strong></th>
<th><strong>Problem Paragraph(s)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce the character, situation, and setting:</td>
<td>What problem arises?</td>
</tr>
<tr>
<td>Details:</td>
<td>Details:</td>
</tr>
<tr>
<td>• Who is my character? What is he or she like?</td>
<td></td>
</tr>
<tr>
<td>• Where is the story set?</td>
<td></td>
</tr>
<tr>
<td>• What is happening?</td>
<td></td>
</tr>
</tbody>
</table>
### Narrative Planning Graphic Organizer

#### CHOICE #1

<table>
<thead>
<tr>
<th>Resolution Paragraph</th>
<th>Concluding Paragraph</th>
</tr>
</thead>
</table>
| How does my character solve the problem?  
What defense mechanism is used? | What is the result of my character’s actions? |
| Details: | How does it end? |
|   | |
|   | |
|   | |

#### CHOICE #2

<table>
<thead>
<tr>
<th>Resolution Paragraph</th>
<th>Concluding Paragraph</th>
</tr>
</thead>
</table>
| How does my character solve the problem?  
What defense mechanism is used? | What is the result of my character’s actions? |
| Details: | How does it end? |
|   | |
|   | |
|   | |

**My Sources:** List any sources you used in planning your informative piece.

**Vocabulary from my research to be used:**
Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can write narrative text about real or imagined experiences or events. (W.4.3)
I can organize events in an order that makes sense in my narrative (W.4.3a)
I can introduce the narrator and/or characters of my narrative. (W.4.3a)

Supporting Learning Target

- I can plan and draft a compelling introduction that establishes a situation by introducing the characters, setting, and plot of my narrative.

Ongoing Assessment

- Millipede Introduction Expansion graphic organizer
- Millipede Introduction draft
## Agenda

1. **Opening**

2. **Work Time**
   - A. Examining a Model: An Introductory Paragraph for the Pufferfish Narrative (10 minutes)
   - B. Modeling: Planning the Millipede Narrative Introduction (15 minutes)
   - C. Partner Work: Planning the Millipede Narrative Introduction (10 minutes)
   - D. Guided Writing: Drafting the Introduction for the Millipede Narrative (10 minutes)

3. **Closing and Assessment**
   - A. Debriefing (5 minutes)

4. **Homework**
   - A. Create a short comic strip based on the plans for Choice #1 of your story.

## Teaching Notes

- This lesson follows a similar flow to Lessons 4 and 5; students review the characteristics and organization of the beginning of two narratives and then expand their plan for the millipede narratives using an Introduction Expansion graphic organizer. Students then use this graphic organizer to write a draft as a class of the beginning paragraphs of the millipede narrative.

- This lesson uses the terms *introduction* and *beginning* interchangeably. This is intentional. This will help students to make meaning of the academic vocabulary word *introduction* and become used to hearing these two terms used together and interchangeably.

- The most important aspect of this lesson is for students to practice using the Narrative Planning graphic organizer and Introduction Expansion graphic organizer. As in Lesson 4, they practice writing about the millipede to prepare for planning and writing narratives based on their expert group animals on the mid-unit assessment and in the lessons that follow.

- The completed Practice Narrative Writing sheet (The Millipede) in the supporting materials has intentional mistakes that will be used to model revision and editing skills in later lessons. If you decide to write your own example, be sure to include similar mistakes so revisions can be made for word choice and supporting details and so edits can be made for spelling, capitalization, and punctuation of dialogue.

- Students will follow this same process—expanding their introductions and writing a draft—for the mid-unit assessment in the next lesson.

- In advance:
  - Display Characteristics of Narratives and Steps for Planning and Drafting My Narrative anchor charts.
  - Review Millipede Narrative draft introduction (see supporting materials) or write your own introduction for the Millipede draft.
Lesson Vocabulary

| Introduction, characters, setting, plot, informative, narrative, expansion

Materials

- Choose-Your-Own-Adventure Narrative Rubric (from Lesson 3; one per student and one to display)
- “Powerful Polly” pufferfish narrative (from Lesson 3; one per student and one to display)
- Sticky notes (two per student)
- Equity sticks
- Characteristics of Narratives anchor chart (begun in Lesson 4; added to in this lesson)
- Can You Survive the Wilderness? (book; one to display for teacher read-aloud)
- Introduction Expansion graphic organizer (one per student and one to display)
- Millipede Narrative Planning graphic organizer (from Lesson 4; one per student and one to display)
- Animal Defenses research journals (from Unit 1, one per student and one to display)
- Expert Group Animal research journals (from Unit 2, Lesson 2; one per student and one to display)
- Glossaries (from Animal Defenses and Expert Group Animal research journals; one per student and one to display)
- Practice Narrative Writing Sheet: The Millipede (one per student and one to display)
- Practice Narrative Writing Sheet: The Millipede (completed, for teacher reference)
- Steps for Planning and Drafting My Narrative anchor chart (from Lesson 4)
- Comic strip homework (one per student and one to display)

Opening

A. Reviewing Learning Targets and Engaging the Writer: Examining a Rubric: Understanding Criteria for Choose-Your-Own-Adventure Narratives (10 minutes)

- Invite students to take out their copies of the Choose-Your-Own-Adventure Narrative Rubric and read the second criteria box for Organization to themselves:
  * “I can write an introduction that establishes a situation by introducing the characters, setting, and plot of my narrative.”
- Review vocabulary from this criterion by asking:
  * “What do we mean by introduction?”

Meeting Students’ Needs

- Reviewing the rubric based on the learning targets outlined from the standards allows students to get a clear picture of what meeting these targets will look like as they write their narratives.
Opening (continued)

- Listen for responses such as: “The beginning or the first part of the narrative.”
- Ask:
  - “What do we mean by characters?”
- Listen for responses such as: “The individuals in a story.”
- Ask:
  - “What do we mean by setting?”
- Listen for responses such as: “The place and time of a story.”
- Ask:
  - “What do we mean by plot?”
- Listen for responses such as: “The problem and events of the story.”
- Explain that by introducing the characters, setting, and plot in the beginning of a narrative, the writer establishes a situation.
- Invite students to read the Meets, Partially Meets, and Does Not Meet descriptions for this target:
  - Meets: My introduction establishes a situation by introducing the characters, setting, and plot of my narrative.
  - Partially Meets: My introduction somewhat establishes a situation by introducing one or two of the following: characters, setting, or plot of my narrative.
  - Does Not Meet: My introduction does not establish a situation or introduce the characters, setting, or plot of my narrative.
- Answer any clarifying questions students have about these descriptions.
- Post the learning target: “I can plan a compelling introduction that establishes a situation by introducing the characters, setting, and plot of my narrative.” Explain to students that today they will take the first steps toward meeting these criteria by developing a plan for and writing the introduction to the millipede narrative.
### A. Examining a Model: An Introductory Paragraph for the Pufferfish Narrative (10 minutes)

- Display “**Powerful Polly**” and invite students to take out their copies. Explain that you will be reading the beginning aloud to them. Tell students they will be listening to see what makes up a narrative. To do this, they will listen and take notes on **sticky notes**, noting what they notice and wonder about the introduction of a narrative.

- Clarify that in Module 1 and the first parts of this module, they have been practicing writing **informative** paragraphs—to summarize or explain—but for this part of the performance task, they will be writing **narrative** paragraphs. Explain that when writing a narrative paragraph, they will also have to be sure that the events they are describing are in an order the reader can understand.

- Their narrative paragraphs should have the same characteristics as other paragraphs: topic sentence, supporting details, and concluding sentence. Review these characteristics if necessary.

- Tell students that the first time you read the beginning of the narrative, you would like them to just listen. Remind them that using this model will help them to determine what to include in their own narratives and how to organize it. Read the text aloud, stopping at: “In a panic she thought, “What should I do? How can I defend myself?”

- Next, invite students to take notes on what they notice and wonder about the introduction of a narrative.

- Read the beginning of the text aloud again. Pause briefly at the end of each paragraph so students can take notes.

- Have students share with a partner the notes they captured. Use **equity sticks** to call on students to share.

- Display the **Characteristics of Narratives anchor chart**. Ask:
  
  * “What did you notice about the beginning of a narrative after listening to the example?”

- Give students a moment to think and review their notes. Then use equity sticks to select students to share their thinking. Add students’ responses by the bullet points about introductions and add your own as necessary.

- Add notes to the bottom of the anchor chart that contain something such as: “A narrative’s introduction (beginning) ...”
  
  – Starts in an engaging way
  
  – Leads into the rest of the story in an engaging way
  
  – Describes the character, setting, and problem

- Repeat this process, reading aloud Chapter 2 of **Can You Survive the Wilderness?** and adding any notes for introductions to the Characteristics of Narratives anchor chart.

### Meeting Students’ Needs

- Providing models of expected work supports all students, especially challenged learners.
### Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain to students that they will now have an opportunity to expand their plans for the introductions of the millipede narrative.</td>
</tr>
</tbody>
</table>

### B. Modeling: Planning the Millipede Narrative Introduction (15 minutes)

- Tell students that now that they have a clearer picture of how the introduction of a narrative is developed, they will practice planning the introduction using the millipede.
- Display and distribute **Introduction Expansion graphic organizers** to each student. Tell students they will be using this graphic organizer to record their ideas for the introduction of the millipede narrative.
- Point out the word *expansion* in the title of this graphic organizer and explain that the organizer will help them expand, or add to, their current narrative plans for their introduction.
- Tell students that the first step will be to review their plan on their **Millipede Narrative Planning graphic organizer**. Display the teacher copy and distribute students’ graphic organizers from Lesson 4.
- Model reading the notes for the Introductory Paragraphs and Problem Paragraph(s), completing the Setting the Stage: Engaging Way to Start Your Narrative, Introducing the Character, and Introducing the Setting boxes of the Introduction Expansion graphic organizer.
- Remind students that they should also be thinking about important vocabulary words they should include in their writing. Model using the **glossaries** of the Animal Defenses and Expert Group Animal research journals to find vocabulary words, recording them in the Important Words to Use box on the Introduction Expansion graphic organizer. See the supporting materials in this lesson for a model of the Introduction Expansion graphic organizer for the millipede narrative. Ask students to record notes along with you.
### C. Partner Work: Planning the Millipede Narrative Introduction (10 minutes)

- Display your Millipede Narrative Planning graphic organizer. Tell students that you would like them to work with a partner to complete the next part of the Introduction Expansion graphic organizer.
- Explain to students that first, they will need to think about how they will introduce the problem of this narrative. Ask:
  - “What is the problem in all of our narratives?”
- Listen for responses such as: “A predator is coming close to the animal.”
- Next, explain to students that they will plan how they will lead the reader into the rest of the story. Explain to students that this is also where they will have to mention the two choices the reader has.
- Tell students to use your research notes and their imaginations to plan and record notes in these two boxes. Ask:
  - “How will you introduce the problem to the reader?”
  - “How will you make the reader want to keep reading?”
- Tell students to be creative but to remember to base their narratives on details and facts from their research. Tell them you are excited to see how many different introductions this story will have.
- Be sure students know that they get to think and talk in pairs but that each student must complete his or her own graphic organizer about the millipede.
- Give students 10 minutes to work. Circulate to confer and support as needed.

### D. Guided Writing: Drafting the Introduction for the Millipede Narrative (10 minutes)

- Tell students that you have already begun to draft your narrative and would like them to help you complete the introduction.
- Using your Millipede Narrative Planning graphic organizer, point out that your draft will be several paragraphs long. Remind students that they learned the characteristics of a strong paragraph in Module 1. Ask them to help you recall:
  - “What are the characteristics of a strong paragraph?”
- Listen for students to mention the topic sentence, detail sentences, and concluding sentence.
- Display and distribute the **Practice Narrative Writing Sheet: The Millipede**. Read the paragraph aloud. Ask:
  - “What facts and details from our research do you notice in the first paragraph of this narrative?” Have students turn to a partner and share one thing they heard that was based on your research about the millipede. Have a few pairs share out and underline parts of the text that are based on your research.
### Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask them to look at your plans on your Introduction Expansion graphic organizer in the first box of the graphic organizer and see if they can identify the sentences in your paragraph that are connected to your plans. (They should notice that the character and setting are introduced.)</td>
</tr>
<tr>
<td>Point out the sequence of events in your paragraph: First we hear the sounds of the forest, then our character is walking along looking for a leaf, and then he finds one and starts eating it.</td>
</tr>
<tr>
<td>Explain that this sequence of events makes sense to the reader. If the character was eating a leaf and then looking for a leaf, readers would be confused. Tell students that this is something you would like them to keep in mind as they write their paragraphs today.</td>
</tr>
<tr>
<td>Ask students to help you continue the introduction. Remind students that they are using “Powerful Polly” and Can You Survive the Wilderness? as mentor texts to write their own choose-your-own-adventure narratives.</td>
</tr>
</tbody>
</table>
| Invite students to turn and talk to a partner. Ask them to reread the beginning paragraph together. Ask:  
  * “Think about your ideas: What will happen and be described in this next paragraph?” |
| Use equity sticks to call on students to share what they talked about with their partners. Listen for responses such as: “The problem needs to be introduced,” or “The toad sees the millipede and hops closer.” |
| Drawing from the ideas the students shared, craft and write a sentence that develops the plot and events (see the example in the supporting materials). Continue this process in order to write the rest of the introductory and problem paragraphs. |
| Invite students to choral read the finished introduction of the Millipede Narrative draft they wrote as a class. |
### Closing and Assessment

**A. Debriefing (5 minutes)**

- Post the *Steps for Planning and Drafting My Narrative anchor chart* begun in Lesson 4. Have students add the steps for their work from this lesson. They should now include some version of the following:
  - Gather resources: Performance Task Prompt, research journals, and Character Profile graphic organizer.
  - Plan: Use above resources and your imagination to write notes planning each component of the Narrative Planning graphic organizer and Introduction Expansion graphic organizer.
  - Write: Use your Narrative Planning graphic organizer and Introduction Expansion graphic organizer to write each paragraph for your narrative. Be sure to include all the information from your notes in your paragraphs.
  - Each time you finish a paragraph, reread the narrative from the start to make sure your sequence of events makes sense.
- Distribute the **comic strip homework** to students and explain the assignment.

### Homework

- Create a short comic strip based on the plans for Choice #1 of your story by drawing a picture for each section of your Narrative Planning graphic organizer. Add a sentence describing each picture at the bottom. Do not worry about how beautiful your pictures are. The purpose is just to visualize the sequence of events that you want to write about.

*Note: Students will need to have their Narrative Planning graphic organizer for the next lesson, the mid-unit assessment. If you are worried about these plans coming back to school after homework, you may consider collecting the graphic organizer and asking students to complete the homework from memory.*

### Meeting Students’ Needs

- Consider giving students a quick mini lesson modeling how to create a simple comic strip or showing them an example of this format.
Teacher Directions: Write the following additions (in bold) underneath on chart paper to create this anchor chart.

**Characteristics of Narratives**

A narrative usually has ...

*characters*: the individuals in a story

*setting*: place and time of a story

*plot*: the events in the story, what happens to the characters
  - Introduction: sets the stage for the reader
  - Rising action: establishes a situation
  - Problem: what the characters are trying to solve
  - Solution: how the characters solve the problem
  - Conclusion: how the narrative is wrapped up

*dialogue*: the speech and conversation of characters in a story

*sensory details*: words authors use in a story to create mental images in their readers’ minds

*transitional words*: words used by authors to show the order of events and passage of time

A narrative’s introduction (beginning) ...
  - Starts in an engaging way
  - Leads into the rest of the story in an engaging way
  - Describes the character, setting, and problem
How will my beginning set the stage for my reader?

- Setting the Stage: Engaging Way to Start Your Narrative
- Introducing the Character:
- Introducing the Setting:
- Introducing the Problem:
- Leading the Reader On: Engaging Way to Lead Into the Rest of the Story
- Important Words to Use:
Setting the Stage: Engaging Way to Start Your Narrative
- Use sounds you might hear in the forest.
- Crunching of leaves
- Birds chirping
- Wind blowing
- Water flowing

Introducing the Character:
- Marty the millipede is walking along looking for food.
- Describe how he walks—he moves his 120 legs slowly.
- Stops to listen to his favorite sound
- Feels the wind blowing against his hard exoskeleton

Introducing the Setting:
- Describe the forest floor.
- Damp ground by the stream
- Crunchy leaves on the ground and moss on the tree roots
- Stream bubbling over rocks

Introducing the Problem:
- Marty is scared of ants and toads.
- The toad spots the millipede from across the stream and hops closer to the millipede.
- Makes a splash in the water when he hops—Marty hears.

Leading the Reader On: Engaging Way to Lead Into the Rest of the Story
- Toad makes a loud “ribbit” noise.
- Marty freezes and looks around.
- Marty spots the toad.
- Choice #1: roll into a ball
- Choice #2: ooze poison

Important Words to Use:
- threaten
- habitat
- exoskeleton
Whoosh!

Crunch crunch!

Chirp! Chirp! Tweet! Chirp!

Marty the millipede listened to the sounds of his habitat as he inched along the forest floor. He was searching for a good, crunchy leaf to eat. His 120 legs marched slowly as his segmented body moved across the ground. He heard the rustling of the leaves in the trees around him, and the water of the stream tumbling by. A squirrel sniffed some moss on the root of a nearby maple tree before scampering up. Marty noticed a leaf on the ground by its trunk and started nibbling it.
Whoosh!

Crunch crunch!

Chirp! Chirp! Tweet! Chirp!

Marty the millipede listened to the sounds of his habitat as he inched along the forest floor. He was searching for a good, crunchy leaf to eat. His 120 legs marched slowly as his segmented body moved across the ground. He heard the rustling of the leaves in the trees around him, and the water of the stream tumbling by. A squirrel sniffed some moss on the root of a nearby maple tree before scampering up. Marty noticed a leaf on the ground by its trunk and started nibbling it.

Across the stream, a warty Toad spotted marty. The toad was searching for his lunch and thought Marty would make a delicious meal. He hopped across the stream, making a little splash.

Marty looked up nervouslee. He was used to the sound of the bubbling stream, but a splash meant something different—something was coming closer to him.

Once on the other side of the stream, the toad croaked a little ribbit sound.

Marty froze. A ribbit could only mean one thing—a hungry toad was close! He looked around. There it was by the stream! He knew he had to do something, and quick, or else the threatenin toad would gobble him up for lunch!

**Choice #1**

If Marty rolls into a ball,
turn to page 4.

**Choice #2**

If Marty oozes poison,
turn to page 5.
Directions: Create a comic strip based on the plans for Choice #1 of your expert group animal’s choose-your-own-adventure narrative. Your strip should have an illustration and caption for each part of your story. Add a sentence describing each picture at the bottom. Do not worry about how beautiful your pictures are. The purpose is just to visualize the sequence of events that you want to write about.
Mid-Unit Assessment: Planning for and Drafting a Narrative Introduction
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

<table>
<thead>
<tr>
<th>I can establish a situation. (W.4.3a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can introduce the narrator and/or characters of my narrative. (W.4.3a)</td>
</tr>
</tbody>
</table>

### Supporting Learning Target
- I can plan and draft a compelling introduction that establishes a situation by introducing the characters, setting, and plot of my narrative.

### Ongoing Assessment
- Mid-Unit 3 Assessment: Planning for and Drafting a Narrative Introduction
- Tracking My Progress, Mid-Unit 3 recording form
Mid-Unit Assessment: Planning for and Drafting a Narrative Introduction

**Agenda**

1. Opening
   - A. Engaging the Writer: Popcorn Read (5 minutes)
   - B. Reviewing Learning Targets (5 minutes)
2. Work Time
   - A. Mid-Unit 3 Assessment, Part 1: Planning the Expert Group Animal Narrative Introduction (15 minutes)
   - B. Mid-Unit 3 Assessment, Part 2: Drafting the Introduction for the Expert Group Animal Narrative (30 minutes)
3. Closing and Assessment
   - A. Reflecting on Learning Targets: Tracking My Progress (5 minutes)
4. Homework
   - A. Continue reading from your independent reading book for this unit.

**Teaching Notes**

- In this assessment, students plan for and draft their introductions to their expert group animal choose-your-own-adventure narratives.
- This assessment is broken into two parts, to help pace students. Both parts occur during this lesson. The first part is the planning of narrative introductions and the second part is the drafting of the narrative introductions. Structure can also allow the assessment to be completed over two days if students need more time.
- Be sure students have access to their research journals and planning graphic organizers.
- Read students’ drafts and Tracking My Progress reflections side by side to determine next steps for instruction for individual students during the second half of this unit. Have feedback to students on these drafts completed for Lesson 9 so students can begin making revisions.
- When assessing and providing feedback to students on their drafts, use only the two rows on the rubric that have been reviewed with students thus far. Note that there is no answer key for this assessment, since students’ planning and drafts will vary widely. Use the following criteria from the rubric to evaluate their work:
  - I can create a narrative based on facts and details from my research about how my animal defends itself. (W.4.2a, W.4.2b, W.4.3a, W.4.3b)
  - I can write an introduction that establishes a situation by introducing the characters, setting, and plot of my narrative. (W.4.3a)
- In advance:
  - Display the Performance Task, Characteristics of Narratives, and Steps for Planning and Drafting My Narrative anchor charts so students can refer to them.
  - Review Popcorn Read protocol (see Appendix).
**Lesson Vocabulary** | **Materials**
--- | ---
Do not preview vocabulary for this assessment lesson. | • Choose-Your-Own-Adventure Narrative Rubric (from Lesson 3; one per student and one to display)
• Characteristics of Narratives anchor chart (begun in Lesson 4)
• Performance Task anchor chart (from Unit 1, Lesson 1)
• Steps for Planning and Drafting My Narrative anchor chart (from Lesson 4)
• Mid-Unit 3 Assessment: Planning for and Drafting a Narrative Introduction (one per student)
• Character Profile graphic organizer (from Lesson 3; one per student)
• Narrative Planning graphic organizer (from Lesson 5; one per student)
• Tracking My Progress, Mid-Unit 3 recording form (one per student)
### Opening

**A. Engaging the Reader: Popcorn Read (5 minutes)**

- Invite students to take out their **Choose-Your-Own-Adventure Narrative Rubrics**. Explain to students that they will use the Popcorn Read protocol to help synthesize their understanding of the rubric discussed thus far.
- Before students begin their Popcorn Read, post and discuss the criteria:
  - Read short phrases or words only (not sentences).
  - Give no commentary or opinions.
  - Try to connect with what was just read (listen carefully to others).
  - Give all voices a chance.
  - Pauses can be powerful.
  - Repeating phrases is allowed (shows where a group collectively agrees).
- Invite students to form a circle. Explain that they should only be reading from the criteria in the first Ideas row and second Organization row:
  * “I can create a narrative based on facts and details from my research about how my animal defends itself.”
  * “I can write an introduction that establishes a situation by introducing the characters, setting, and plot of my narrative.”
- Give students a minute to reread these rows on the rubric and underline a word or phrase that stands out to them.
- Invite students to begin the protocol. Remind students that when one person reads a word or phrase, the other students should look for a phrase they’ve underlined that matches or connects in some way with the phrase they’ve just heard. This process continues until there are no more phrases students want to share aloud (until there are no more “kernels left to pop.”).

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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<tbody>
<tr>
<td>• Reviewing the rubric based on the learning targets outlined from the standards allows students to get a clear picture of how they can meet these targets as they write their narratives.</td>
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</tbody>
</table>
### Opening (continued)

#### B. Review Learning Targets (5 minutes)
- Post the learning target: “I can plan and draft a compelling introduction that establishes a situation by introducing the characters, setting, and plot of my narrative.”
- Circle the words *plan, draft, introduction, characters, events, setting,* and *plot.* Explain that this learning target connects the directions to the criteria on the rubric they have reviewed thus far.
- Post the **Characteristics of Narratives anchor chart** (from Lesson 4), **Performance Task anchor chart** (from Unit 1, Lesson 1) and the **Steps for Planning and Drafting My Narrative anchor chart** (from Lesson 4) and clarify the learning targets further as needed.

### Meeting Students’ Needs
- Discussing and clarifying the language of learning targets helps build academic vocabulary.

### Work Time

#### A. Mid-Unit 3 Assessment, Part 1: Planning the Expert Group Animal Narrative Introduction (15 minutes)
- Tell students that in a moment, they will begin the Mid-Unit 3 Assessment. Tell them that this assessment focuses only on the parts of the rubric that they have reviewed so far. Tell students to try their best on spelling and handwriting but that these will not be assessed on their draft writing. Therefore, they should focus on their ideas and the story. They will have time to revise for conventions in future lessons.
- Distribute the **Mid-Unit 3 Assessment: Planning for and Drafting a Narrative Introduction.** Explain to students that this assessment is broken up into two parts: First, they must complete a graphic organizer to plan their introduction paragraphs, and then they will use this plan to write a draft of the introduction and problem paragraphs.
- Invite students to take out their expert group animal **Character Profile** and **Narrative Planning graphic organizers.** Remind them to use their plans, the prompt, and the anchor charts at the front of the classroom as resources while they plan and write their drafts.
- Tell students to begin Part 1 of the assessment. While students are taking the assessment, circulate to monitor their test-taking skills. This is an opportunity to analyze students’ behaviors while taking an assessment. Document strategies class members use during the assessment. For example, look for students annotating their text, using their graphic organizer to take notes before answering questions, and students going back to the text as they answer questions.
- After 15 minutes, bring students back together whole group.

### Meeting Students’ Needs
- If students receive accommodations for assessment, communicate with the cooperating service providers about the practices of instruction in use during this study as well as the goals of the assessment.
- For some students, this assessment might require more than the 45 minutes allotted. Consider giving students time over multiple days if necessary.
### Work Time (continued)

#### B. Mid-Unit 3 Assessment, Part 2: Drafting the Introduction for the Expert Group Animal Narrative (30 minutes)

- Explain to students that now, they should begin drafting their introduction and problem paragraphs of their narratives. Remind them that it is important to skip lines as they write their drafts so they have space to make revisions later on. Continue circulating to monitor and support students as necessary. Provide minimal support because this is an assessment.
- After 25 minutes, remind class members that they have 5 minutes left. Have students who finish early reread their narratives before they turn them in. On a separate piece of paper, these students can revise their sketches or list details they may add in a second draft.

#### Meeting Students’ Needs

- Providing paragraph frames and word banks that allow students to write about what they know will support learners who struggle with language.
- Depending on the availability of technology and your students’ ability to type, you might wish to have some or all students complete their drafts on the computer. If you choose to do this, make sure their work is double-spaced and printed so they can make annotations in the following lessons.
### Closing and Assessment

**A. Reflecting on Learning Targets: Tracking My Progress (5 minutes)**

- Congratulate students on their hard work on the mid-unit assessment. Distribute *Tracking My Progress, Mid-Unit 3 recording forms* to students. Remind students that successful learners keep track and reflect on their own learning. Point out that students have been doing this informally all year, during debriefs when they consider how well they are making progress toward the learning targets.
- Review Step 1 in the self-assessment and remind students that this is where you would like them to explain what the target means to them. For example, the target uses the phrase “establishes a situation.” They should write what the target means “in their own words” by explaining what it means to set the stage of their narrative.
- Point out the second step and explain that this is similar to the thumbs-up, -sideways, or -down method that they have used in previous lessons. Students should also explain why they think they “need more help,” “understand some,” or are “on the way,” and give examples. Consider giving students an example such as: “I circled that I need more help, because I don’t remember what the setting of a narrative is, so I don’t know how to introduce it in my own writing.”
- Collect students’ self-assessments to use as formative assessment to guide instructional decisions during the remainder of this unit.

### Meeting Students’ Needs

- Developing self-assessment and reflection supports all students, but research shows it supports struggling learners most.

### Homework

- Continue reading from your independent reading book for this unit.

*Note: Make copies of each student’s draft introductions for assessment purposes. They will need their originals back in Lesson 8 to revise.*
Mid-Unit 3 Assessment:
Planning for and Drafting a Narrative Introduction

Name:  
Date:

Part 1: Introduction Expansion

Directions: Use your Expert Group Animal character profile and Narrative Planning graphic organizer to complete the graphic organizer below.

Setting the Stage: Engaging Way to Start Your Narrative
Introducing the Character:
Introducing the Setting:
Introducing the Problem:
Leading the Reader On: Engaging Way to Lead into the Rest of the Story

Important Words to Use:
Mid-Unit 3 Assessment:
Planning for and Drafting a Narrative Introduction

**Part 2: Drafting**

**Directions:** Use the lines below to write a draft of the Introductory and Problem paragraphs of your expert group animal choose-your-own-adventure narrative.
Mid-Unit 3 Assessment:
Planning for and Drafting a Narrative Introduction

Choice #1

Choice #2
Learning Target: I can plan and draft a compelling introduction that establishes a situation by introducing the characters, setting, and plot of my narrative.

1. The target in my own words is:


2. How am I doing? Circle one.

   I need more help to learn this.  
   I understand some of this.  
   I am on my way!

3. The evidence to support my self-assessment is:


## Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

| I can use the writing process to produce clear and coherent writing (with support). (W.4.5) |
| I can effectively participate in a conversation with my peers and adults. (SL.4.1) |
| I can use dialogue and descriptions to show the actions, thoughts, and feelings of my characters. (W.4.3b) |

## Supporting Learning Target

<table>
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<tr>
<th>Supporting Learning Target</th>
<th>Ongoing Assessment</th>
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<tr>
<td>I can give kind, helpful, and specific feedback to my critique partner.</td>
<td>Choose-your-own-adventure narrative (annotated first draft)</td>
</tr>
<tr>
<td>I can critique my writing partner’s narrative for organization and style.</td>
<td>Narrative Feedback recording form</td>
</tr>
<tr>
<td>I can explain how authors of narratives use dialogue strategically to show their characters’ thoughts and feelings.</td>
<td>Participation in creation of Writing Dialogue anchor chart</td>
</tr>
<tr>
<td>Agenda</td>
<td>Teaching Notes</td>
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</table>
| 1. Opening  
   A. Reviewing Learning Targets (5 minutes) | • For this lesson, students will need their draft narratives from the mid-unit assessment (Lesson 7). Be sure to make copies to evaluate the assessment before handing back students’ original drafts.  
• Each day starting with this lesson, students edit their work using a different colored pencil for each different focus. See supporting materials and Work Time C.  
• Read students’ drafts and Tracking My Progress reflections from Lesson 7 side by side to determine next steps for instruction for individual students during the second half of this unit. Have feedback to students on these drafts completed for Lesson 9 so students can begin making revisions.  
• When assessing and providing feedback to students on their drafts, use only the two rows on the rubric reviewed with students thus far:  
  – I can create a narrative based on facts and details from my research about how my animal defends itself.  
  – I can write an introduction that establishes a situation by introducing the characters, setting, and plot of my narrative.  
• The second part of this lesson helps students identify how authors of narrative text strategically use dialogue to show their characters’ thoughts and feelings. Students examine dialogue in two narratives and discuss why the author chose to use dialogue in a particular part of the story. In Lesson 9, they will plan where to add dialogue for their narratives, learn the conventions of using dialogue (indenting, quotation marks, etc.) and add dialogue with proper conventions. To further support students, you may consider providing additional models from other texts students have read as a class. Students will benefit from seeing multiple models of how authors use dialogue in narrative texts.  
• In advance:  
  – Display anchor charts (see materials below).  
  – Organize students in pairs to critique each other’s writing.  
  – Review Peer Critique protocol (see Appendix).  
  – Prepare Writing Dialogue anchor chart (see supporting materials). |
| 2. Work Time  
   A. Reviewing Peer Critique Protocol (5 minutes)  
   B. Peer Critique of Drafts: Introductions (15 minutes)  
   C. Annotating Drafts for Revision (10 minutes)  
   D. Examining Models of Dialogue (20 minutes) | |
| 3. Closing and Assessment  
   A. Exit Ticket (5 minutes) | |
| 4. Homework  
   A. Continue reading in your independent reading book for this unit. | |
### Lesson Vocabulary

- organize, events, makes sense, critique, specific, feedback, revision, strategically

### Materials

- Characteristics of Narratives anchor chart (from Lesson 4)
- Performance Task anchor chart (from Lesson 1)
- Steps for Planning and Drafting My Narrative anchor chart (from Lesson 4)
- Choose-Your-Own-Adventure Narrative Rubric (from Lesson 3; one per student and one to display)
- Equity sticks
- Peer Critique Protocol anchor chart (from Module 1, Unit 1, Lesson 7)
- Choose-your-own-adventure narrative (first draft) (from Lesson 7; one per student)
- Expert Group Animal Narrative Planning graphic organizer (from Lesson 5; one per student)
- Introduction Expansion graphic organizer (from Lesson 7; one per student)
- Narrative Feedback recording form (one per student and one to display)
- Green colored pencils (one per student)
- Document camera
- Steps for Revising My Writing anchor chart (from Unit 2, Lesson 10)
- *Can You Survive the Wilderness?* (book; one for display/teacher read-aloud)
- Highlighter (one per student)
- “Powerful Polly” pufferfish narrative (from Lesson 3; one per student and one to display)
- Writing Dialogue anchor chart (new; co-created during Work Time D)
- Index cards (one per student)
### Opening

#### A. Reviewing Learning Targets (5 minutes)

- Be sure the following anchor charts are posted: Characteristics of Narratives anchor chart, Performance Task anchor chart, and Steps for Planning and Drafting My Narrative anchor chart.
- Invite students to take out their copies of the Choose-Your-Own-Adventure Narrative Rubric and read the first criteria box for “Organization” to themselves:
  * “I can organize events in an order that makes sense in my narrative.”
- Review vocabulary from this criterion by asking:
  * “What do we mean by organize?”
- Listen for responses such as: “The action of the story,” or “The parts of the plot—the introduction, rising action, problem, solution, and conclusion.”
- Ask:
  * “What do we mean by events?”
- Listen for responses such as: “How a piece of writing is ordered.”
- Ask:
  * “What do we mean by makes sense?”
- Listen for responses such as: “It is not confusing to the reader.”
- Remind students that they have been talking about this already when planning the different parts of their narratives.
- Invite students to read the “Meets,” “Partially Meets,” and “Does Not Meet” descriptions for this target:
  - Meets: My narrative includes an introduction, rising action, problem, solution, and conclusion. The events of my narrative unfold in a logical order that makes sense to the reader.
  - Partially Meets: My narrative may be missing one or two of the following: an introduction, rising action, problem, solution, and conclusion. The events of my narrative are in an order that somewhat makes sense to the reader.
  - Does Not Meet: My narrative is missing three or more of the following: an introduction, rising action, problem, solution, and conclusion. The events of my narrative are not in a logical order and do not make sense to the reader.
- Answer any clarifying questions students have about these descriptions.

### Meeting Students’ Needs

- Reviewing the rubric based on the learning targets outlined from the standards allows students to get a clear picture of how they can meet these targets as they write their narratives.
- Discussing and clarifying the language of learning targets helps build academic vocabulary.
Opening (continued)

• Read aloud the learning targets:
  * “I can give kind, helpful, and specific feedback to my critique partner.”
  * “I can critique my writing partner’s narrative for organization and style.”
  * “I can explain how authors of narratives use dialogue strategically to show their characters’ thoughts and feelings.”

• Ask students what they know already about these targets. Give students a chance to talk with a partner about their thinking and then cold call students using **equity sticks**. Students might recall the critique process from Module 1 and Lesson 5 of this unit. Have them share what they recall.

• Then ask students to identify parts of the learning targets that are unfamiliar or confusing. Pay particular attention to the meanings of the words *specific*, *critique*, and *dialogue* as you clarify the meaning of the targets with students.
### A. Reviewing the Peer Critique Protocol (5 minutes)

- Review the main components of a successful *critique* on the **Peer Critique Protocol anchor chart**.
- Remind students that giving and receiving critique and feedback is something they practiced in Module 1.
- Set up nonnegotiables for the students before they begin this process. The following four points are crucial for success:
  - **Be kind**: Always treat others with dignity and respect. This means we never use words that are hurtful, including sarcasm.
  - **Be specific**: Focus on particular strengths and weaknesses, rather than making general comments such as: “It’s good” or “I like it.” Provide insight into why it is good or what specifically you like about it.
  - **Be helpful**: The goal is to contribute positively to the individual or the group, not simply to be heard. Echoing the thoughts of others or cleverly pointing out irrelevant details wastes time.
  - **Participate**: Peer critique is a process to support each other, and your feedback is valued!
- Tell students that today they are going to listen to their partners read their *choose-your-own-adventure* narrative drafts. Tell them they will focus their feedback using the Choose-Your-Own-Adventure Narrative Rubric. Explain that today their feedback will focus only on the portions of the rubric reviewed thus far—the first row of the “Ideas” section, and the first two rows of the “Organization” section. Review the criteria for “Meets” on the rubric. Students will focus mainly on whether characters and events are research-based and the organization of their drafts. Remind students that for this feedback to be helpful they should only focus on these specific areas. Pointing out misspelled words or incorrect punctuation will not be helpful at this point in the writing process. That will be saved for the final editing.
- Explain to students that they will share their plans and their drafts with their partners. Tell students they should be looking to see that everything from the writer’s plan is in the draft, that the order is logical and makes sense, and that the characters and details are based on their research.

### B. Peer Critique of Drafts: Introductions (15 minutes)

- Partner students with a student from their same expert group (monarch butterfly with monarch butterfly, gazelle with gazelle, etc.) if possible.

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### Meeting Students’ Needs

- Critiques simulate the experiences students will have in the workplace and help build a culture of achievement in your classroom.
- Consider modeling with the model paragraph from the millipede narrative, if you feel that your students need more practice with peer critique before working with a partner.
- To help students keep their writing organized, consider keeping a class accordion folder labeled with names or individual writing folders to keep graphic organizers, drafts, and feedback recording forms.
Work Time (continued)

- Return students’ original copies of their choose-your-own-adventure narrative (first drafts) from the mid-unit assessment. Invite students to take out their Expert Group Animal Narrative Planning and Introduction Expansion graphic organizers. Distribute the Narrative Feedback recording forms. Explain to students that this is where they will record their partner’s feedback on their work and their next steps.

- Have students read the directions and then restate in their own words to their partner:
  1. Author and Listener: Review area of critique focus from rubric.
  2. Author: Reads his or her piece.
  3. Listener: Gives feedback based on rubric criteria: “I like how you ______.” “You might consider ____________.”
  4. Author: Records feedback.
  5. Author: Says: “Thank you for ______.” “My next step will be __________________.”
  6. Switch roles and repeat.

- Address any clarifying questions and then have students begin.

- Circulate to support students with the critique process, helping them to follow the protocol and focus their feedback using the rubric’s “Ideas” and “Organization” sections.
### C. Annotating Drafts for Revision (10 minutes)

- Have students thank their partners and move to their own workspaces. Explain that they will now use their partner’s feedback to make revision notes to their drafts.
- Be sure that every student has a **green colored pencil**. Post the **Steps for Revising My Writing anchor chart**:
  1. Choose the correct colored pencil. Today’s color is ______.
  2. Decide where you are going to add a revision note based on feedback or new learning.
  3. Write your revision note in the space above the sentence you want to change.
  4. Read through your entire narrative and continue to record your revision notes.
  5. Review your revision notes to be sure they make sense.
- Tell them that you would like them to add notes to their drafts using the green colored pencils today. (This step in the anchor chart will vary from day to day depending on the color used for revisions. See the teaching notes of each subsequent lesson.)
- Explain to students that since they skipped lines when they wrote the drafts, you would like them to write notes telling what they will add or change in a given part of their narrative on these blank lines. When they have a sentence they would like to add to or change, they can make a note on the blank line above it. Explain that this will allow them to read and easily reread their drafts and note changes at the same time without erasing or crossing things out.
- Give students 15 minutes to add revision notes to their drafts. Circulate to confer and support students as needed.
- Once students have recorded their revisions, have them organize their writing materials. Explain that they will use these and will need to keep them with their drafts and recording forms as they continue to move through the writing process during the next several lessons.

### Meeting Students’ Needs

- If students are using a computer for word processing, they will still make revisions on a printed copy of their drafts until they are ready to complete a second draft later in the unit.
- Students annotate each type of revision of their drafts (e.g., ideas, organization) with a different colored pencil. This will allow students to keep track of the focus of each revision.
- To support visual learners, consider using a document camera with a few sentences written with skipped lines to demonstrate this note-taking technique for students.
## D. Examining Models of Dialogue (20 minutes)

- Briefly review how to punctuate dialogue. Ask: “How does a writer show you when a character is speaking?” Listen for students to mention quotation marks. Demonstrate briefly by writing the following sentence on the board:
  - “I am glad to see you today, Joe,” said the teacher.
- Explain that this sentence shows that someone is talking.
- Ask students what they notice about the sentence. They should notice the quotation marks and the word “said.” Ask students:
  * “Are the words ‘said the teacher’ what the character said? How do we know?”
- Explain that when authors want to show that a character is speaking, they use quotation marks to show the words spoken by the character.
- Tell students that you will read a short excerpt of a narrative aloud as they follow along. When you read it the first time, you would like them to listen for the gist of the text. Display and distribute photocopies of pages 57–59 of *Can You Survive the Wilderness?* Remind them to look for quotation marks.
- Display and read aloud from pages 57–59 of *Can You Survive the Wilderness?* After reading the text once, ask students to turn to a partner and share what they think this ending is about. Have a few pairs share out and be sure students understand that the main character is lost in the woods and trying to climb down a cliff. The character is scared because the character is alone, but then finds two people on a hike.
- Before you read the text a second time, tell students that their job during this read is to underline or highlight any dialogue they notice in the text. Ask student to get out a pencil or highlighter. As they identify dialogue in the text and discuss how it is used, draw their attention to how dialogue looks. Do they notice anything else about how dialogue looks in this text that they didn’t notice in the example sentence? Listen for responses such as: “It is set apart with quotation marks,” or “It is indented when a new person speaks,” or “The word ‘says’ is not the only way a writer indicates that someone is speaking.”
- Ask students to turn and discuss the following with a neighbor:
  * “How did the author use dialogue strategically in this text?”
Cold call students to share something their partner said. Students should notice the following dialogue:

“Hello!” they shout. “Are you OK?”
“I’m so glad you spotted me,” you say, suddenly feeling exhausted. “I don’t know how much longer I could have survived out here.”

They also should notice the following in terms of using dialogue strategically:
- There were only three sections of dialogue.
- The dialogue helped to show readers that the characters were rescuing the main character.

Next ask students: “Besides giving you information about the characters and their feelings, what did this dialogue do for you as a reader?” They might notice that dialogue engages readers: it causes the reader to be interested in how the story ends (i.e., “Why is the main character so glad to be spotted?”)

Tell students they will now look at a second example of dialogue, this time from a text they’ve already read. Ask students to repeat the process above with a partner:
1. Read the text and underline any examples of dialogue they notice.
2. Discuss with your partner: “How did the author use dialogue strategically in this text?”

Ask students to get out their copies of “Powerful Polly.” Ask them to read only the first page. Give pairs 10 minutes to work.

Focus students whole group. Ask student to share what they noticed about the strategic use of dialogue in this story. They might notice the following:
- “The character was usually talking out loud to herself.”
- “The dialogue helped the readers to understand how she was feeling about seeing the shark and what her thoughts were about what to do next.”

Title and post a new Writing Dialogue anchor chart. Underneath the title, write: “Why do authors use dialogue?” Capture students’ thoughts on this question. The list might include:
- To show what a character is feeling
- To show what a character is thinking
Work Time (continued)

- To show how they interact with others

- Still on the anchor chart, write: “How do authors use dialogue strategically?” This list might include:
  - When they need to show a character’s thoughts or feelings about something happening in the story
  - Dialogue should be used only in a few places, not every sentence or paragraph.

- Tell students they will come back to this chart during the next lesson.

Closing and Assessment

A. Exit Ticket (5 minutes)

- Gather students. Ask them to assess themselves and the class on the learning targets: “I can give kind, helpful, and specific feedback to my critique partner,” and “I can critique my writing partner’s narrative for organization and style.”

- Distribute index cards and have them record their name and reflect and respond to the following:
  - Front: “Did you meet the learning targets? What is your evidence?”
  - Back: “How do you think the class did with giving kind, helpful, and specific feedback? What is your evidence?”

Homework

- Continue reading in your independent reading book for this unit.
### Narrative Feedback Recording Form (Front)

<table>
<thead>
<tr>
<th>Date:</th>
<th>Partner:</th>
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<tbody>
<tr>
<td>Focus of critique:</td>
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<tr>
<td>My partner liked ...</td>
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<tr>
<td>My partner suggested ...</td>
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# Narrative Feedback Recording Form

(Back)

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Focus of critique:

My partner liked ...

My partner suggested ...

My next step(s) ...

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Focus of critique:

My partner liked ...

My partner suggested ...

My next step(s) ...
Writing Dialogue Anchor Chart
(For Teacher Reference)

Teacher Directions: Write the following on chart paper to create this anchor chart.

Writing Dialogue
“Why do authors use dialogue?” Capture students’ thoughts on this question. The list might include:

* To show what a character is feeling
* To show what a character is thinking
* To show how they interact with others

“How do authors use dialogue strategically?” Capture students’ thoughts on this question. The list might include:

* When they need to show a character’s thoughts or feelings about something happening in the story
* Dialogue should be used only in a few places, not every sentence or paragraph.
Grade 4: Module 2B: Unit 3: Lesson 9
Revising Narrative Texts: Including Dialogue
GRADE 4: MODULE 2B: UNIT 3: LESSON 9
Revising Narrative Texts:
Including Dialogue

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

<table>
<thead>
<tr>
<th>Target</th>
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<tbody>
<tr>
<td>I can use dialogue and descriptions to show the actions, thoughts and feelings of my characters. (W.4.3a)</td>
<td></td>
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<tr>
<td>I can use commas and quotation marks to identify speech and quotations from a text. (L.4.2b)</td>
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<tr>
<td>I can use transitional words and phrases to show the sequence of events in a narrative text. (W.4.3b)</td>
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Supporting Learning Targets

<table>
<thead>
<tr>
<th>Target</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can identify the parts of my narrative that would benefit from added dialogue.</td>
<td>• Choose-your-own-adventure narrative (annotated first draft)</td>
</tr>
<tr>
<td>• I can revise my narrative to strategically add dialogue.</td>
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</tbody>
</table>

• Ongoing Assessment:
  - Choose-your-own-adventure narrative (annotated first draft)
## Agenda

<table>
<thead>
<tr>
<th>Opening</th>
<th>Work Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Reviewing Learning Targets (10 minutes)</td>
<td>A. Guided Practice: Annotating Millipede Draft for Use of Dialogue (10 minutes)</td>
</tr>
<tr>
<td></td>
<td>B. Partner Work: Identifying Where to Add Dialogue to Narratives (10 minutes)</td>
</tr>
<tr>
<td></td>
<td>C. Modeling: Writing Dialogue for the Millipede Narrative (10 minutes)</td>
</tr>
<tr>
<td></td>
<td>D. Independent Practice: Writing Dialogue (15 minutes)</td>
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<table>
<thead>
<tr>
<th>Closing and Assessment</th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Sharing and Debriefing (5 minutes)</td>
<td>• In this lesson, students record notes for their ideas for dialogue in Work Times A and B. In Work Time C and D, they add the dialogue using correct conventions.</td>
</tr>
<tr>
<td></td>
<td>• Consider a quick pre-assessment to gauge whether your students already know how to use quotation marks effectively. If so, consider accelerating Work Time C.</td>
</tr>
<tr>
<td></td>
<td>• Consider giving students their own copy of the Writing Dialogue anchor chart to refer to and keep in their writing folders.</td>
</tr>
<tr>
<td></td>
<td>• Teaching and learning to write dialogue is challenging. A possible extension to this lesson might be for students to have a conversation in groups and practice writing that dialogue together.</td>
</tr>
<tr>
<td></td>
<td>• If your district has printed lessons for you in black and white, it may be helpful to view this lesson in color, and print colored some copies. Go to EngageNY.org or commoncoresuccess.elschools.org and search for 4th grade, Module 2B, Unit 3 lessons.</td>
</tr>
<tr>
<td></td>
<td>• In advance:</td>
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<tr>
<td></td>
<td>– Prepare the Millipede Narrative draft with purple annotations to model where you would include dialogue and why.</td>
</tr>
<tr>
<td></td>
<td>– Display Writing Dialogue and Steps for Revising My Writing anchor charts (from Unit 2, Lesson 10).</td>
</tr>
</tbody>
</table>

## Teaching Notes
### Lesson Vocabulary
- dialogue, speech, quotations, strategically

### Materials
- Choose-Your-Own-Adventure Narrative Rubric (from Lesson 3; one per student and one to display)
- Equity sticks
- Document camera
- Writing Dialogue anchor chart (from Lesson 8)
- Millipede Narrative draft (from Lesson 6)
- Steps for Revising My Writing anchor chart (from Unit 2, Lesson 10)
- Purple colored pencils (one per student)
- Millipede Narrative Draft (Revised; For Teacher Reference)
- Choose-Your-Own-Adventure narrative (first draft) (from Lesson 7; one per student)
- *Can You Survive the Wilderness?* (book; one for display and teacher read-aloud)
- Photocopies of pages 57–59 of *Can You Survive the Wilderness?* (from Lesson 9)
- Sticky notes (several per student)
### A. Reviewing Learning Targets (10 minutes)

- Invite students to take out their copies of the **Choose-Your-Own-Adventure Narrative Rubric** and read the second criteria box for “Ideas” to themselves:
  * “I can use dialogue and descriptions to show the actions, thoughts, and feelings of my characters.”

- Review vocabulary from this criterion by asking:
  * “What do we mean by *dialogue*?”

- Listen for responses such as: “Dialogue is what characters say or think in a story.”

- Remind students that they started talking about this in the previous lesson.

- Invite students to read the “Meets,” “Partially Meets,” and “Does Not Meet” descriptions for this target and answer any clarifying questions students may have.

- Invite students to read the second criteria box for “Conventions” to themselves:
  * “I can use correct conventions in my writing.”

- Review vocabulary from this criterion by asking:
  * “What do we mean by *conventions*?”

- Listen for responses such as: “These are the rules of writing for punctuation and capitalization.”

- Ask:
  * “What do we mean by *speech and quotations*?”

- Listen for responses such as: “Speech is what the characters say or think, and quotations are phrases or sentences copied directly from our research.”

- Read the second criterion for “Meets” for this target:
  * “I correctly use commas and quotation marks to identify speech and quotations from a text.”

- Tell students that there is a specific way to punctuate dialogue in texts and that they will need to learn these conventions in order to include dialogue in their narratives.

- Post and read aloud the learning targets:
  * “I can identify the parts of my narrative that would benefit from added dialogue.”
  * “I can revise my narrative to strategically add dialogue.”

### Meeting Students’ Needs

- Reviewing the rubric based on the learning targets outlined from the standards allows students to get a clear picture of how they can meet these targets as they write their narratives.

- Discussing and clarifying the language of learning targets helps build academic vocabulary.

- In Lesson 8, students examined an excerpt from the text *Can You Survive in the Wilderness?* for models of dialogue. Consider providing additional models from other texts students have read as a class. Students will benefit from seeing multiple models of how authors use dialogue in narrative texts.
### Opening (continued)

- Ask students what they know already about these targets. Give students a chance to talk with a partner about their thinking and then cold call students using **equity sticks**.
- Ask the class to identify parts of the learning targets that are unfamiliar or confusing. Pay particular attention to the meaning of the word *strategically* as you clarify the meaning of the targets with students.

### Meeting Students’ Needs

<table>
<thead>
<tr>
<th>Opening (continued)</th>
<th>Meeting Students’ Needs</th>
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### Work Time

**A. Guided Practice: Annotating Millipede Draft for Use of Dialogue (10 minutes)**

- Display the **Writing Dialogue anchor chart** (started in Lesson 8) and review why authors use dialogue and how they use it strategically. Explain to students that today they will have a chance to decide where to include dialogue into their narratives.
- Display the **Millipede Narrative draft** from Lesson 6. Tell students that now that they have a good understanding for how authors use dialogue strategically, that you would like them to help you plan for adding dialogue to the millipede narrative. Review the **Steps for Revising My Writing anchor chart**:
  1. Choose the correct colored pencil. Today’s color is ______.
  2. Decide where you are going to add a revision note based on feedback or new learning.
  3. Write your revision note in the space above the sentence you want to change.
  4. Read through your entire narrative and continue to record your revision notes.
  5. Review your revision notes to be sure they make sense.
- Tell students that today they will be adding revision notes using **purple colored pencils**. Tell students that first you will read them your draft so they can help you decide where dialogue might be used strategically.
- Read the draft aloud to students. Ask them to turn to a neighbor and share where they think dialogue could be added and why it should be added right there. Use equity sticks to call on students to share their thinking.
### Work Time (continued)

**Meeting Students’ Needs**

- After several students have shared their suggestions, demonstrate how you would annotate your paragraph using a colored pencil. Use an asterisk in the space above a sentence where dialogue will be added to describe what will be added (and add the dialogue later). For example, above the sentence “He was used to the sound of the bubbling stream, but a splash meant something different—something was coming closer to him,” you might add: “The millipede will wonder to himself what made that noise.” See the Millipede Narrative Draft (Revised; For Teacher Reference) in the supporting materials of this lesson for possible revisions.

- Remind students that they won’t actually write dialogue yet. Their purpose is just to find places where including dialogue might make their narrative stronger.

### B. Partner Work: Identifying Where to Add Dialogue to Narratives (10 minutes)

- Have students take out their choose-your-own-adventure narrative (first draft). Partner them with a student from a different expert group and post the following directions on the board:
  1. Read your narrative to your partner.
  2. Partner listens for areas where dialogue might be added.
  3. Partner shares suggestions based on the Writing Dialogue anchor chart.
  4. Switch roles and repeat.
  5. Follow the Steps for Revising My Writing anchor chart to record revision notes for adding dialogue to your narrative.

- Tell them to use the Writing Dialogue anchor chart as a guide when deciding where to add dialogue to their drafts and for what purpose. Circulate and support students as needed in recording their ideas on their drafts.

### C. Modeling: Writing Dialogue for the Millipede Narrative (10 minutes)

- Bring students back together and refer to the Writing Dialogue anchor chart. Remind them that in the last lesson, they used models of narratives to see how authors used dialogue strategically. Tell them that now they will examine the mentor texts to look at the conventions for writing dialogue.

- Display page 58 of *Can You Survive the Wilderness?* and have students take out their photocopies of the same page. Focus students on the fourth paragraph (starting with: “Hello!” they shout. “Are you OK?”) through the end of page 59. Read this section aloud to students as they follow along.

- Ask them to look closely at the text. Ask them to turn to a partner and share what they notice about the dialogue in this section of the text.

- **ELL students might need extra support in deciding where to add dialogue. Consider partnering ELL1s with ELL2s who speak the same home language or scheduling conferences with these students.**

- **You may choose to have students do this individually or with a partner for added support.**

- **If you do not have enough sticky notes for students, consider having them use index cards or a separate sheet of writing paper.**
### Work Time (continued)

- Have pairs share out. Help them to see the following conventions and add to the Writing Dialogue anchor chart:
  - The words spoken by characters begin and end with quotation marks.
  - Dialogue can be a whole sentence or just a part at the beginning, middle, or end.
  - New paragraphs are started when a different character is speaking.
  - Sentences with dialogue often contain words such as *shouted* and *said*.
- Next, display the Millipede Narrative draft with your annotations for where to add dialogue. Explain that now you would like them to write the dialogue they just planned for using correct conventions.
- Tell students that now you would like to model how to you would like them to do this. Think aloud about how you will use your annotated notes to write dialogue. For example: “If I look at my notes here, I know I want to have the millipede wonder to himself what made that noise. So I think I will have him think something like ‘What was that?’ Using a **sticky note**, write your dialogue (‘What was that?’ he thought to himself.) Be sure to point out the conventions used specific to writing dialogue—the quotation marks, the question mark, and the lowercase ‘h’ in “he.”
- Ask students to point out which conventions you used when writing this dialogue.
- Point out that the dialogue you have written sounds authentic. Your character did not use any modern slang such as “Huh?” He also used language that showed he was alert because most animals pay close attention to their surroundings. Explain that as they write their dialogue today, they need to pay attention to the conventions and to scientific accuracy whenever they are adding to their writing.
- Ask student to recall the steps you took to write your dialogue and record these steps on the board. Students should observe the following steps in your modeling:
  1. Read all your revision notes for adding dialogue (in purple).
  2. Locate the first place you plan to add dialogue marked with a purple asterisks.
  3. On a sticky note, write the dialogue you want to add to that place using correct conventions (and scientific accuracy).
  4. Continue to write dialogue for each place you have planned to add it.

### Meeting Students’ Needs

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<tr>
<td><strong>D. Independent Practice: Writing Dialogue (15 minutes)</strong></td>
<td>• Consider having students check the conventions of their dialogue with you or a partner if they finish early.</td>
</tr>
<tr>
<td>• Tell students that now they are ready to write the dialogue they want to add to their narratives using correct conventions.</td>
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</tr>
<tr>
<td>• Distribute sticky notes and have students go back to their choose-your-own-adventure narrative (first draft). Remind them to follow the steps you modeled using their sticky notes. Remind them also to refer to their research if needed to ensure their dialogue is based on that research.</td>
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<tr>
<td>• Confer with students as they write dialogue.</td>
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### Closing and Assessment

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<tbody>
<tr>
<td><strong>A. Sharing and Debriefing (5 minutes)</strong></td>
<td></td>
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<tr>
<td>• Have students select one piece of dialogue they added to their narratives to share with a partner. Once students have shared, ask them to discuss:</td>
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<tr>
<td>* “How did adding dialogue improve your narrative?”</td>
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### Homework

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>• Finish revising for dialogue.</td>
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</tbody>
</table>
Whoosh!

Crunch crunch!

Chirp! Chirp! Tweet! Chirp!

Marty the millipede listened to the sounds of his habitat as he inched along the forest floor. He was searching for a good, crunchy leaf to eat. His 120 legs marched slowly as his segmented body moved across the ground. He heard the rustling of the leaves in the trees around him, and the water of the stream tumbling by. A squirrel sniffed some moss on the root of a nearby maple tree before scampering up. Marty noticed a leaf on the ground by its trunk and started nibbling it.

Across the stream, a warty Toad spotted marty. The toad was searching for his lunch and thought Marty would make a delicious meal. He hopped across the stream, making a little splash.

Marty looked up nervously. **please make new paragraph about this - ”What was that?” he thought to himself. He was used to the sound of the bubbling stream, but a splash meant something different—something was coming closer to him.

Once on the other side of the stream, the toad croaked a little ribbit sound.

“You can only eat one thing—” he thought to himself. He was used to the sound of the bubbling stream, but a splash meant something different—something was coming closer to him.

Once on the other side of the stream, the toad croaked a little ribbit sound.

"Ribbit! Ribbit!"

Marty froze. A ribbit could only mean one thing—a hungry toad was close! He looked around. There it was by the stream! He knew he had to do something, and quick, or else the threatenin toad would gobble him up for lunch!

Choice #1

If Marty rolls into a ball, turn to page 4.

Choice #2

If Marty oozes poison, turn to page 5.
Grade 4: Module 2B: Unit 3: Lesson 10
Revising Narrative Texts: Using Sensory Details and Vocabulary
**Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)**

- I can use sensory details to describe experiences and events precisely. (W.4.3c)
- I can express ideas using carefully chosen words. (L.4.3a)
- I can correctly use domain-specific vocabulary related to the topic of study. (L.4.6)

**Supporting Learning Targets**

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can use sensory details and vocabulary from my research to describe my animal and its defense mechanisms in my narrative.</td>
<td>• Choose-your-own-adventure narrative (annotated first draft)</td>
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</table>
# Agenda

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<tr>
<th>Opening</th>
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<tbody>
<tr>
<td>1. Opening</td>
<td>• This is the second of a sequence of three lessons focused on revising the choose-your-own-adventure narratives. Students again use colored pencils to make revision notes and revisions. As homework for Lesson 11, they will write a clean second draft incorporating their revisions for dialogue (from Lesson 9), word choice (from this lesson), and conclusion (from Lesson 11).</td>
</tr>
<tr>
<td>A. Reviewing Learning Targets: Examining a Rubric to Understand Criteria for Choose-Your-Own Adventure Narratives (10 minutes)</td>
<td>• If your district has printed lessons for you in black and white, it may be helpful to view this lesson in color, and print colored some copies. Go to EngageNY.org or commoncoresuccess.elschools.org and search for 4th grade, Module 2B, Unit 3 lessons.</td>
</tr>
<tr>
<td>2. Work Time</td>
<td>• In advance:</td>
</tr>
<tr>
<td>A. Examining Models for Sensory Details and Vocabulary (15 minutes)</td>
<td>– Gather Millipede Narrative planning resources: Introduction Expansion graphic organizer, Millipede Narrative Planning graphic organizer, and the glossaries from the Animal Defenses and Expert Group Animal research journals.</td>
</tr>
<tr>
<td>B. Guided Practice: Revising for Sensory Details/Vocabulary from Research (15 minutes)</td>
<td>– Post: Steps for Revising My Writing anchor chart (from Unit 2, Lesson 10).</td>
</tr>
<tr>
<td>C. Independent Practice: Revising for Sensory Details and Vocabulary from Research (15 minutes)</td>
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<tr>
<td>3. Closing and Assessment</td>
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<tr>
<td>A. Setting a Revision Goal (5 minutes)</td>
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</tr>
<tr>
<td>4. Homework</td>
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</tr>
<tr>
<td>A. Finish revising for sensory details.</td>
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</tbody>
</table>
## Lesson Vocabulary

- sensory details, precise, accurate, descriptions

## Materials

- Choose-Your-Own-Adventure Narrative Rubric (from Lesson 3; one per student and one to display)
- *Can You Survive the Wilderness?* (text; one for display and teacher read-aloud)
- Photocopies of pages 57–59 of *Can You Survive the Wilderness?* (from Lesson 8)
- "Powerful Polly" pufferfish narrative (from Lesson 3; one per student and one to display)
- Millipede Narrative draft (from Lesson 6)
- Steps for Revising My Writing anchor chart (from Unit 2, Lesson 10)
- Red colored pencils (one per student)
- Equity sticks
- Millipede Narrative Draft (Revised; For Teacher Reference)
- Sticky notes (several per student)
- Introduction Expansion graphic organizer (from Mid-Unit 3 assessment; one per student)
- Expert Group Animal Narrative Planning graphic organizer (from Lesson 5; one per student)
- Animal Defenses research journals (from Unit 1; one per student and one to display)
- Expert Group Animal research journals (from Unit 2; Lesson 2; one per student and one to display)
- Glossaries (from pages 13-14 of Animal Defenses and Expert Group Animal research journals; one per student and one to display)
- Choose-your-own-adventure narrative (first draft) (from Lesson 7; one per student)
### Opening

**A. Reviewing Learning Targets: Examining a Rubric to Understand Criteria for Choose-Your-Own-Adventure Narratives (10 minutes)**

- Invite students to take out their copies of the Choose-Your-Own-Adventure Narrative Rubric and read the first criteria box for Word Choice to themselves:
  
  * “I can use sensory details and vocabulary from my research to describe my animal and its defense mechanisms in my narrative.”

- Review vocabulary from this criterion by asking:
  
  * “What do we mean by sensory details?”

- Listen for responses such as: “They are details involving the five senses—sight, hearing, touch, smell, and taste.”

- Ask:
  
  * “What do we mean by descriptions?”

- Listen for responses such as: “An explanation of something.”

- Invite students to read the “Meets,” “Partially Meets,” and “Does Not Meet” descriptions for this target and answer any clarifying questions students may have.

- Explain to students that in today’s lesson they will revise their narratives by adding sensory details and vocabulary to make sure their writing is descriptive and based on their research.
A. Examining Models for Sensory Details and Vocabulary (15 minutes)

- Tell students that you will read a short excerpt of a *Can You Survive the Wilderness?* aloud. Display and ask students to get out their photocopies of pages 57–59 (from Lesson 8).
- Before you read the text aloud, tell students that their job during this read is to circle sensory words or phrases they notice in the text. Ask students to get out a pencil and read pages 57–59 aloud.
- Ask students to turn and discuss with a neighbor:
  - “How did the author use sensory words or phrases in this text?”
  - “You can see exposed tree roots sticking out of it.”
  - “The sound of the crashing water below is deafening.”
- Next ask:
  - “What did these details do for you as a reader?”
  - Listen for responses such as: “The details helped me visualize the setting,” or “The details made me feel like I was right there with the main character.”
- Tell students they will now look at a second text for examples of descriptions that use vocabulary related to animal defense mechanisms. Ask students to repeat the process above with a partner:
  1. Read the text and circle any examples of descriptions with vocabulary from their research on animal defense mechanism that they notice.
  2. Discuss with your partner: What did these descriptions do for you as a reader?
- Ask students to get out their copies of “*Powerful Polly.*” Ask them to read the first page only. Give pairs 10 minutes to work.
- Focus students whole group. Ask student to share what they noticed about the descriptions in this story. They might notice the following vocabulary in the text: *prey, predator, spines, defend.* Point out vocabulary related to descriptions of the habitat and the animals if students miss identifying these words: “coral reef,” “tropical ocean,” “tiger shark,” “pufferfish,” “fins.”
- Invite students to Think-Pair-Share:
  - “How do authors write descriptions based on research?”
### Work Time (continued)

- Listen for responses such as: “By using sensory details that help readers feel as if they are there with the main character,” “By using sensory details to help the reader visualize what is going on,” or “By using vocabulary from their research.”

### Meeting Students’ Needs

- The Millipede Narrative draft is the same draft written in Lesson 6 and revised in Lesson 9. See the teaching note at the beginning of this lesson and supporting materials.

### B. Guided Practice: Revising for Sensory Details/Vocabulary from Research (15 minutes)

- Display the Millipede Narrative draft from Lesson 6. Tell students that now that you would like them to help you revise the millipede narrative to add descriptions that use sensory details and vocabulary from your research on millipedes. Review the Steps for Revising My Writing anchor chart:
  1. Choose the correct colored pencil. Today’s color is ______.
  2. Decide where you are going to add a revision note based on feedback or new learning.
  3. Write your revision note in the space above the sentence you want to change.
  4. Read through your entire narrative and continue to record your revision notes.
  5. Review your revision notes to be sure they make sense.

- Tell students that today they will be adding revision notes using red colored pencils and that first you will read them your draft so they can help you decide where to add descriptions.

- Read the draft aloud to the class. Ask students to turn to a neighbor and share where they think descriptions could be added and why it should be added there. Use equity sticks to call on students to share their thinking.

- After several students have shared their suggestions, demonstrate how you would annotate your paragraph using a colored pencil. Use an asterisk in the space above a sentence where a description will be added to describe what will be added (and add the description later). For example, for adding sensory details, above the sentence “He heard the rustling of the leaves in the trees around him, and the water of the stream tumbling by,” you might add: “Add a description of what Marty is doing to help the reader visualize him. Add a sensory detail like touch/feeling to help the readers feel like they are there with Marty.” An example for adding vocabulary may be as follows: above the sentence “He was used to the sound of the bubbling stream, but a splash meant something different—something was coming closer to him,” you might say, “Add the word ‘predator’ because that is what Marty is worried is approaching.” See the Millipede Narrative Draft (Revised; For Teacher Reference) in the supporting materials of this lesson for possible revisions.

- Explain that now you would like to write the descriptions they just helped to plan for the Millipede narrative.
### Work Time (continued)

- Tell students that now you would like to model how you would like them to do this. Think aloud about how you will use your annotated notes to write descriptions. For example: “So if I look at my notes here, I know I want to add a description of what Marty is doing and some sensory details to help readers visualize him and feel like they are there with him. So I think I will add something like, ‘Marty tilted his head up towards the sky, listening for his favorite sound. He soon heard the birds singing a happy tune as a breeze whistled over his hard exoskeleton.’” Using a **sticky note**, write your description (“Marty tilted his head up towards the sky, listening for his favorite sound. He soon heard the birds singing a happy tune as a breeze whistled over his hard exoskeleton.”).

- Repeat for adding vocabulary using the word “predator.”

- Ask:
  - “What resources can you look at when thinking about what vocabulary words from your research you want to include?”

- Listen for responses such as looking at their **Introduction Expansion graphic organizers**, **Expert Group Animal Narrative Planning graphic organizers**, and glossaries from the **Animal Defenses research journal** and **Expert Group Animal research journal**.

- Ask students to recall the steps you took to write your descriptions and record these steps on the board. Students should observe the following steps in your modeling:
  1. Use the Steps for Revising My Writing to make revision notes for adding descriptions (in red).
  2. Locate the first place you plan to add description marked with a red asterisk.
  3. On a sticky note, write the description you want to add to that place.

### Meeting Students’ Needs

- If you do not have enough sticky notes for students, consider having them use index cards or a separate sheet of writing paper.

- You may choose to have students do this individually or with a partner for added support.

### C. Independent Practice: Revising for Sensory Details and Vocabulary from Research (15 minutes)

- Tell students that now they are ready to write the descriptions they want to add to their narratives.

- Distribute sticky notes and have students take out their **choose-your-own-adventure narrative (first draft)**. Remind them to follow the steps you modeled using their sticky notes. Remind them also to refer to their research journals if needed to ensure their descriptions include vocabulary from their research.

- Confer with students as they revise.
### Closing and Assessment

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Setting a Revision Goal (5 minutes)</strong></td>
</tr>
<tr>
<td>• Invite students to take out their Choose-Your-Own-Adventure Narrative Rubrics.</td>
</tr>
<tr>
<td>• Explain that they will now set a goal for revision based on the rubric. Tell students they will use these goals when revising their narratives for homework.</td>
</tr>
<tr>
<td>• Allow the class 5 minutes to write one or two goals for revisions. Tell students to write their goal(s) at the top of their draft.</td>
</tr>
<tr>
<td>• If necessary, model briefly: “I included only two sensory details, so my goal will be to add two more details to my narrative.”</td>
</tr>
</tbody>
</table>

### Homework

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Finish revising for sensory details.</td>
</tr>
</tbody>
</table>
Whoosh!
Crunch crunch!
Chirp! Chirp! Tweet! Chirp!

Marty the millipede listened to the sounds of his habitat as he inched along the forest floor. He was searching for a good, crunchy leaf to eat. His 120 legs marched slowly as his segmented body moved across the ground. He heard the rustling of the leaves in the trees around him, and the water of the stream tumbling by. Marty tilted his head up towards the sky, listening for his favorite sound. He soon heard the birds singing a happy tune as a breeze whistled over his hard exoskeleton. A squirrel sniffed some moss on the root of a nearby maple tree before scampering up. Marty noticed a leaf on the ground by its trunk and started nibbling it.

Across the stream, a warty Toad spotted Marty. The toad was searching for his lunch and thought Marty would make a delicious meal. He hopped across the stream, making a little splash.

Marty looked up nervously.

“What was that?” he thought to himself.

He was used to the sound of the bubbling stream, but a splash meant something different—something was coming closer to him. He hoped it wasn’t a predator like an ant or a toad.

Once on the other side of the stream, the toad croaked a little ribbit sound.

“Ribbit! Ribbit!”

Marty froze. A ribbit could only mean one thing—a hungry toad was close! He looked around. There it was by the stream! He knew he had to do something, and quick, or else the threatening toad would gobble him up for lunch!

Choice #1

If Marty rolls into a ball, turn to page 4.

Choice #2

If Marty oozes poison, turn to page 5.
Grade 4: Module 2B: Unit 3: Lesson 11
Revising Narrative Texts: Exciting Endings
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can write a conclusion to my narrative. (W.4.3d)
- I can use transitional words and phrases to show the sequence of events in a narrative text. (W.4.3b)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can write an ending that resolves the problem and brings the story to a close.</td>
<td>• Choose-your-own-adventure narrative (annotated first draft)</td>
</tr>
<tr>
<td>• I can use transitional words and phrases to sequence events in my narrative.</td>
<td></td>
</tr>
</tbody>
</table>

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## Agenda

<table>
<thead>
<tr>
<th>Number</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Opening</td>
</tr>
<tr>
<td></td>
<td>A. Reviewing Learning Targets (5 minutes)</td>
</tr>
<tr>
<td>2.</td>
<td>Work Time</td>
</tr>
<tr>
<td></td>
<td>A. Examining a Rubric: Understanding Criteria for Choose-Your-Own-Adventure Narratives (15 minutes)</td>
</tr>
<tr>
<td></td>
<td>B. Guided Practice: Writing an Exciting Ending for the Millipede Draft (5 minutes)</td>
</tr>
<tr>
<td></td>
<td>C. Guided Practice: Adding Transitional Words and Phrases to the Millipede Draft (15 minutes)</td>
</tr>
<tr>
<td></td>
<td>D. Independent Practice: Writing a Conclusion and Adding Transitional Words/Phrases (15 minutes)</td>
</tr>
<tr>
<td>3.</td>
<td>Closing and Assessment</td>
</tr>
<tr>
<td></td>
<td>A. Sharing (5 minutes)</td>
</tr>
<tr>
<td>4.</td>
<td>Homework</td>
</tr>
<tr>
<td></td>
<td>A. Revise your choose-your-own-adventure narrative based on your revision notes to create a second draft of your story.</td>
</tr>
</tbody>
</table>

## Teaching Notes

- This is the third of a sequence of three lessons focused on revising the choose-your-own-adventure narratives. In this lesson students examine a mentor text to identify characteristics of narrative conclusions and transitional words. This lesson takes place in two parts, with Work Times A and B focusing on narrative conclusions and Work Times C and D focusing on transitional words. If you anticipate students needing additional modeling or practice in either of these areas, consider splitting this lesson into two days.

- This lesson uses the terms “conclusion” and “ending” interchangeably. This is intentional. This will help students to make meaning of the academic vocabulary word conclusion and become used to hearing these two terms used together and interchangeably.

- Students again use colored pencils to make revision notes for transitions. As homework, they will write a clean second draft incorporating their revisions for dialogue (from Lesson 9), word choice (from Lesson 10), and conclusion/transition words (from Lesson 11).

- If your district has printed lessons for you in black and white, it may be helpful to view this lesson in color, and print colored some copies. Go to EngageNY.org or commoncoresuccess.elschools.org and search for 4th grade, Module 2B, Unit 3 lessons.

- In advance:
  - Gather Millipede Narrative Planning graphic organizer and draft.
  - Prepare Timely Transitions anchor chart.
  - Post: Steps for Revising My Writing anchor chart (from Unit 2, Lesson 10).
### Lesson Vocabulary

- Conclusion, ending, transitional words and phrases, transition, temporal words

### Materials

- Characteristics of Narratives anchor chart (begun in Lesson 4; added to in this lesson)
- “Powerful Polly” pufferfish narrative (from Lesson 3; one per student and one to display)
- Sticky notes (two per student)
- Equity sticks
- *Can You Survive the Wilderness?* (book; one for display and teacher read-aloud)
- Choose-Your-Own-Adventure Narrative Rubric (from Lesson 3; one per student and one to display)
- Document camera
- Millipede Planning graphic organizer (from Lesson 4; for display)
- Millipede Narrative draft (from Lesson 6; for display)
- Timely Transitions anchor chart (new; co-created during Work Time C)
- Choose-your-own-adventure narrative (first draft) (from Lesson 7; one per student)
- Expert Group Animal Narrative Planning graphic organizer (from Lesson 5; one per student)
- Red colored pencils (one per student)
- Steps for Revising My Writing anchor chart (from Unit 2, Lesson 10)
### Opening

**A. Review Learning Targets (5 minutes)**
- Invite students to read the learning targets to themselves:
  - “I can write a conclusion that resolves the problem and brings the story to a close.”
  - “I can use transitional words and phrases to sequence events in my narrative.”
- Display the **Characteristics of Narratives anchor chart** and remind students that they are working toward writing a narrative during this module.
- Explain that they are almost finished revising their drafts, but that their narratives are missing two important elements—transition words and conclusions. Point to these bullet points on the anchor chart.
- Invite students to turn and talk to review vocabulary from this targets by asking:
  - “What do we mean by *conclusion*?”
- Listen for responses such as: “It is the ending of the story.”
- Ask:
  - “What do we mean by *transitional words and phrases*?”
- Listen for responses such as: “These are words that help move a story from one part to another.”
- If students are unsure of the meanings of these terms, reassure them that they will discuss them in depth later in the lesson.

### Meeting Students’ Needs

- Discussing and clarifying the language of learning targets helps build academic vocabulary.
### Work Time

**A. Examining a Rubric: Understanding Criteria for “Choose-Your-Own-Adventure” Narratives (10 minutes)**

- Display “Powerful Polly” and invite students to take out their copies. Explain that you will be reading the conclusions of this narrative aloud to them. Tell students they will be listening to see what makes an ending to a narrative. To do this, they will listen and take notes on **sticky notes**, writing what they notice and wonder about the conclusion of a narrative.
- Read aloud the ending for Choice 1 first, starting with, “Then the tiger shark swam closer.” Invite students to take notes on what they notice and wonder about the ending of a narrative. Pause briefly at the end of each paragraph so students can take notes.
- Have students share with a partner the notes they captured. Use **equity sticks** to call on students to share.
- Ask:
  - “What did you notice about the conclusion of this narrative?”
- Give students a moment to think and review their notes. Then use equity sticks to select students to share their thinking. Students should notice that the problem is solved and the story is brought to a close.
- Explain to students that the choose-your-own-adventure format is different from most narratives because it has more than one ending. Tell students that you would like to read the second choice ending for this narrative to see if they can notice what the two conclusions have in common. This will help them to determine the characteristics of narrative conclusions in general.
- Repeat this process, reading aloud Choice #2, having students take notes, and then discussing what they notice about this conclusion.
- Refer to the Characteristics of Narratives anchor chart. Ask:
  - “What did these endings have in common?”
- Add to the anchor chart with bullet points about endings similar to the following:
  - A narrative’s conclusion (ending) ...
  - Resolves the problem
  - Brings the story to a close
- Explain to students that they have written conclusions in the past, but they have been conclusions to informational writing, such as the informational page about their expert group animal. Help students to understand the difference between narrative and information conclusions by asking and elaborating on the following questions:

### Meeting Students’ Needs

- If you feel that your students need another example, repeat the process in Work Time A for a third time, reading pages 57–59 of *Can You Survive the Wilderness?* Then add any additional notes about conclusions to the Characteristics of Narratives anchor chart.
## Work Time (continued)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>* “How is the ending of a narrative like an ending of an informative text?”</td>
</tr>
<tr>
<td>• Listen for responses such as: “It brings the piece to a close and reminds the reader of the main topic of the piece.”</td>
</tr>
<tr>
<td>• Ask:</td>
</tr>
<tr>
<td>* “How is the ending of a narrative different from an ending of an informative text?”</td>
</tr>
<tr>
<td>• Listen for responses such as: “It doesn’t restate a topic sentence.”</td>
</tr>
<tr>
<td>• Invite students to take out their copies of the Choose-Your-Own-Adventure Narrative Rubric and read the third criteria box for “Organization” to themselves:</td>
</tr>
<tr>
<td>* “I can write a conclusion that resolves the problem and brings the story to a close.”</td>
</tr>
<tr>
<td>• Invite students to read the “Meets,” “Partially Meets,” and “Does Not Meet” descriptions for this target and answer any clarifying questions they may have.</td>
</tr>
<tr>
<td>• Explain to students that they will now have an opportunity to write one of the endings for the Millipede narrative.</td>
</tr>
</tbody>
</table>

## B. Guided Practice: Writing an Exciting Ending for the Millipede Draft (10 minutes)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The Millipede Narrative draft is the same draft written in Lesson 6 and revised in Lessons 9 and 10. See the teaching note at the beginning of this lesson and supporting materials.</td>
</tr>
<tr>
<td>• Display the Millipede Narrative Planning graphic organizer and remind students that they have already planned the ending for this narrative.</td>
</tr>
<tr>
<td>• Ask them to take a look at your plans on your Millipede Narrative Planning graphic organizer in the Choice #1 boxes of the graphic organizer to remind themselves of what was planned for this choice.</td>
</tr>
<tr>
<td>• Display the Millipede Narrative draft and point out the sequence of events in your draft: First we hear the sounds of the forest, then our character is walking along looking for a leaf, and then he finds one and starts eating it when he hears a frog.</td>
</tr>
<tr>
<td>• Remind them that this sequence of events makes sense to the reader. If the character was eating a leaf and then looking for a leaf, readers would be confused. Tell students that this is something you would like them to keep in mind as they write their endings today.</td>
</tr>
<tr>
<td>• Ask students to help you continue the narrative to write the ending. Remind students that they are using “Powerful Polly” as a mentor text to write their own choose-your-own-adventure narratives.</td>
</tr>
<tr>
<td>• Invite students to turn and talk to a partner. Ask them to reread the draft together. Ask:</td>
</tr>
<tr>
<td>* “Think about your ideas: What will happen and be described in the ending?”</td>
</tr>
</tbody>
</table>
### Work Time (continued)

- Use equity sticks to call on students to share what they talked about with their partner. Listen for responses such as: “The problem will be resolved,” or “The millipede will protect himself by rolling into a ball.”
- Drawing from the ideas the students shared, craft and write a sentence that begins to resolve the problem (see the example in the supporting materials). Continue this process in order to write the rest of the resolution and concluding paragraphs.
- Invite students to choral read the finished ending of the Millipede Narrative draft they wrote as a class.

### Meeting Students’ Needs

- To support visual learners, consider using a document camera with a few sentences written double-spaced to demonstrate this revision technique for students.
- Co-constructed anchor charts help students understand abstract concepts. As anchor charts are created, ask students to record the charts in their research notebooks so they can easily refer to them.

### C. Guided Practice: Adding Transitional Words and Phrases to the Millipede Draft (15 minutes)

- Remind students that they will need to include transitional words and phrases in their narratives.
- Ask the students to turn and talk to a partner:
  * “What does the word *transition* mean?”
- Listen for responses such as: “They help move from one thing to another,” or “the time between things happening.”
- Ask:
  * “What are some examples of when we have transitions during the day?” (i.e., getting out of bed and getting dressed for school, going back to class after lunch). Point out other words students may know with this same root, such as *transfer*.
- Remind students that even though they are writing a “research-based narrative” and they are putting in a lot of information, they are actually telling a story.
- Ask students to turn and talk with a partner, and then share out:
  * “What are some key features of narrative writing? How is it different from expository/informational writing?”
- Listen for students to mention that a narrative:
  - Has story elements: characters, setting, plot, and theme
  - Often includes dialogue
  - Can show passage of time, with things happening over hours, days, months, or years
- Point out that transition words can help readers in lots of ways. Informative writing also includes transition words. But in narratives, one common and important type of transition are words or phrases that indicate that time has passed, or *temporal words*.
- Show the students the *Timely Transitions anchor chart*. Read the student-friendly definition aloud: “Timely transitions help the reader know the order of events in a narrative.”
Work Time (continued)

• Ask students to look back at “Powerful Polly.” Tell them that in a moment, you would like them to follow along as you read the first section aloud (stopping at “How can I defend myself?”). Ask them to raise their hands if they see a transitional word or phrase that is either on the anchor chart already or could be added.

• Begin reading. Watch for students to raise their hands at the phrases “It was a warm tropical morning” or “a moment later.” As students identify possible transitions, add these phrases to the class anchor chart at the top and add the full exact quote from the text at the bottom.

• Invite students to read the second criteria box for “Word Choice” to themselves:
  * “I can use temporal words and phrases to show the sequence of events in my narrative.”

• Invite students to read the “Meets,” “Partially Meets,” and “Does Not Meet” descriptions for this target and answer any clarifying questions.

• Display the Millipede Narrative draft again. Tell them that in a moment you will read it aloud and that you want them to listen for places transitions could be added to show the passage of time.

• Read the draft aloud as students follow along.

• Ask the class to think, then talk with a partner:
  * “Where else might I add a transition to help the reader know that time has passed?”
  * “What transition might I use?”

• Use equity sticks to call on one or two students to share what they and their partner suggest. On the model paragraph, show how to annotate the draft by adding their suggested transitions in red colored pencil.

D. Independent Practice: Writing a Conclusion and Adding Transitional Words/Phrases (15 minutes)

• Invite students to take out their choose-your-own-adventure narrative (first draft) and Expert Group Animal Narrative Planning graphic organizer. Tell students that they will be drafting their ending paragraphs for Choice #1 and revising their own drafts by adding transitions that help show the passage of time. Tell them that you would like them to add notes to their drafts using the red colored pencils.

• Explain to students that they will plan and write the ending for the Choice #2 ending in Lesson 12 for the end of unit assessment in Lesson 13.

• Simplifying task directions and/or creating checklists from them are important steps in helping students learn to self-monitor their progress.
### Work Time (continued)

- Post the **Steps for Revising My Writing anchor chart**:
  1. Choose the correct colored pencil. Today’s color is _____.
  2. Decide where you are going to add a revision note based on feedback or new learning.
  3. Write your revision note in the space above the sentence you want to change.
  4. Read through your entire narrative and continue to record your revision notes.
  5. Review your revision notes to be sure they make sense.

- Remind students that they skipped lines when they wrote their drafts and to skip lines when writing their endings. They should write their transitions on the blank lines. Explain that this will make it easy for them to reread their drafts and make changes without having to erase or cross out phrases.

- Have students move to their own workspace. Give them 15 minutes to write their endings and add transitions to their drafts. Circulate to confer and support students as needed.

### Meeting Students’ Needs

- Students might require additional time for drafting their ending and revising for transitional words. Consider allowing students to continue drafting their writing during your additional literacy block. Alternatively, this lesson can be split over two days, allowing students more time for drafting and revising their narratives.

### Closing and Assessment

**A. Sharing (5 minutes)**

- Invite students to gather into their expert groups and share one transition word or phrase they added into their drafts and one sentence they are proud of from their ending.
- Explain to students that for homework, you would like them to write a full second draft of their narrative, revising based on their revision notes for ideas (green), dialogue (purple and sticky notes), and word choice (red).
- Ask them to once again skip lines as they write or double space if they are word processing.
- If necessary, briefly model this process using the Millipede Narrative draft.

### Homework

- Revise your choose-your-own-adventure narrative based on your revision notes to create a second draft of your story.
Teacher Directions: Write the following additions (in bold) on chart paper to create this anchor chart.

Characteristics of Narratives

A narrative usually has ...

- **characters**: the individuals in a story
- **setting**: place and time of a story
- **plot**: the events in the story, what happens to the characters
  - Introduction: sets the stage for the reader
  - Rising action: establishes a situation
  - Problem: what the characters are trying to solve
  - Solution: how the characters solve the problem
  - Conclusion: how the narrative is wrapped up
- **dialogue**: the speech and conversation of characters in a story
- **sensory details**: words authors use in a story to create mental images in their readers’ minds
- **transitional words**: words used by authors to show the order of events and passage of time

A narrative’s introduction (beginning) ...
- Starts in an engaging way
- Leads into the rest of the story in an engaging way
- Describes the character, setting, and problem

A narrative’s conclusion (ending) ...
- Resolves the problem
- Brings the story to a close
Whoosh!

Crunch crunch!

Chirp! Chirp! Tweet! Chirp!

Marty the millipede listened to the sounds of his habitat as he inched along the forest floor. He was searching for a good, crunchy leaf to eat. His 120 legs marched slowly as his segmented body moved across the ground. He heard the rustling of the leaves in the trees around him, and the water of the stream tumbling by. Marty tilted his head up toward the sky, listening for his favorite sound. He soon heard the birds singing a happy tune as a breeze whistled over his hard exoskeleton. A squirrel sniffed some moss on the root of a nearby maple tree before scampering up. Marty noticed a leaf on the ground by its trunk and started nibbling it.

Across the stream, a warty Toad spotted marty. The toad was searching for his lunch and thought Marty would make a delicious meal. He hopped across the stream, making a little splash.

Marty looked up nervously.

“What was that?” he thought to himself.

He was used to the sound of the bubbling stream, but a splash meant something different—something was coming closer to him. He hoped it wasn’t a predator like an ant or a toad.

A short while later, once on the other side of the stream, the toad croaked a little ribbit sound.

“Ribbit! Ribbit!”

Marty froze. A ribbit could only mean one thing—a hungry toad was close! He looked around. There it was by the stream! He knew he had to do something, and quick, or else the threatenin toad would gobble him up for lunch!

Choice #1

If Marty rolls into a ball, turn to page 4.

Choice #2

If Marty oozes poison, turn to page 5.
Millipede Narrative Draft
(Revised, for Teacher Reference)

**Choice #1**

Marty decided the best way to protect himself from the toad would be to roll into a ball. His body quickly curled up, with his hard black and yellow exoskeleton protecting it. *By the time* the toad looked over to where Marty had been eating the leaf, Marty had blended right in with the pebbles around him!

“Hey, where’d that millipede go?” the toad asked himself. “He was there just a second ago! Now, all I see are rocks and pebbles!”

The toad looked around for another second, and then noticed a fly sitting on a nearby flower. Giving up on looking for the millipede, he hopped away towards the fly instead.

*Finally* Marty was safe! He carefully unrolled himself and finished eating his leaf.
Teacher Directions: Create this on chart paper in advance. Be sure to leave space for other transition words students find during their independent reading. Leave space at the bottom to add examples from the mentor texts.

**Timely Transitions**

Why use timely transitions?
Timely transitions help the reader know the order of events in a narrative.

<table>
<thead>
<tr>
<th>After</th>
<th>In the evening</th>
</tr>
</thead>
<tbody>
<tr>
<td>After a while</td>
<td>In the meantime</td>
</tr>
<tr>
<td>After that</td>
<td>In the morning</td>
</tr>
</tbody>
</table>
| Afterward | Late the next ...
| A long time ago | Later on |
| An hour later | Later on that day |
| A short while later | Meanwhile |
| As soon as | Never |
| At first | Next |
| At the start | Right away |
| Before | Soon |
| By the time | Suddenly |
| During | That night |
| Finally | The following day |
| Immediately | The next day |
| In just minutes | Then |
| In the afternoon | When |
| In the beginning |

**Examples:**

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</tbody>
</table>
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| a long time ago | later on |
| an hour later | later on that day |
| a short while later | meanwhile |
| as soon as | never |
| at first | next |
| at the start | right away |
| before | soon |
| by the time | suddenly |
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| in just minutes | then |
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| in the beginning | |

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### Long-Term Target Addressed (Based on NYSP12 ELA CCLS)

I can use conventions to send a clear message to my reader. (L.4.1g, L.4.2a, b, and d, and L.4.3b)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• I can check my peers’ work for correct capitalization.</td>
<td>• Conventions anchor charts</td>
</tr>
<tr>
<td>• I can check my peers’ work for correct spelling (including homophones and affixes).</td>
<td>• Choose-your-own-adventure narrative (second drafts</td>
</tr>
<tr>
<td>• I can check my peers’ work for correct punctuation at the ends of their sentences.</td>
<td>annotated for edits)</td>
</tr>
<tr>
<td>• I can check my peers’ work for correct conventions when writing dialogue.</td>
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</tr>
</tbody>
</table>
## Agenda

1. Opening
   - A. Engaging the Writer (5 minutes)
   - B. Reviewing Learning Targets (5 minutes)
2. Work Time
   - A. Chalk Talk (15 minutes)
   - B. Modeling: Editing for Conventions (5 minutes)
   - C. Editing Stations (25 minutes)
3. Closing and Assessment
   - A. Debriefing (5 minutes)
4. Homework
   - A. Complete a final sketch for the cover of your narrative on your Performance Task template.

## Teaching Notes

- In this lesson, students read each other’s narratives to identify issues with conventions (spelling, punctuation, capitalization, and dialogue). Students just note mistakes as they edit; they do not actually correct all of the errors during this lesson. In the next lesson (Lesson 13), students will complete the End of Unit 3 Assessment, where they write Choice #2 of their choose-your-own-adventure narratives on-demand. Then in the final lesson of the module, students revise their edited drafts from this lesson and combine them with their writing from the end-of-unit assessment to publish their performance task. 

- Given the 1-hour time constraint, language standards are not heavily emphasized in these modules. Students need additional instruction on language conventions during other parts of the school day. This lesson is intended to review and reinforce that additional instruction and help students apply the conventions to their own authentic product. For more information on structuring an additional literacy block that gives students additional instruction and practice with language standards, see the Foundational Reading and Language Resource Package for Grades 3–5.

- In advance:
  - Set up four stations with Conventions anchor charts, markers, and colored pencils. Ideally these stations will have enough room for about a quarter of your class to sit. Students should be able to see Conventions anchor charts, access materials, and have a surface to write on (table/desks or clipboards).
  - Students again use colored pencils. A different color is used for each different type of convention (for example, orange-colored pencils and orange markers for spelling, purple for dialogue, green for punctuation, blue for capitalization).
  - Having different colors at each station will help students focus on editing for one convention at a time and recall what must be corrected when revising. Place colored pencils and markers that match at each station.
  - Post one piece of chart paper at each station. On each chart, write the following questions in the designated color:
    - How do I make sure my SPELLING is correct? (orange)
    - What are the conventions for DIALOGUE? (purple)
    - How do I know if my ENDING PUNCTUATION is correct? (green)
    - How do I know if my CAPITALIZATION is correct? (blue)
  - Review: Chalk Talk protocol (see Appendix).
### Lesson Vocabulary

- conventions, capitalization, punctuation, dialogue, homophones, affixes

### Materials

- Document camera
- Convention-less paragraph (for teacher modeling)
- Choose-Your-Own-Adventure Narrative Rubric (from Lesson 3; one per student and one to display)
- Four Conventions anchor charts (new; teacher-created; see Teaching Notes)
- Markers (several each of four different colors to match each chart; see teaching notes above)
- Colored pencils (four different colors with enough of each color for a quarter of your class; see teaching notes above)
- Performance Task anchor chart (from Unit 1, Lesson 1)
- Steps for Planning and Drafting My Narrative anchor chart (from Lesson 4)
- Expert Group Animal Narrative Planning graphic organizer (from Lesson 5; one per student)
- Performance Task template (students’ copies from previous lessons; for homework)
### Opening

**A. Engaging the Writer (5 minutes)**
- Using a **document camera**, display your short **convention-less paragraph**. Ask for a volunteer to try to read it aloud.
- Ask the class what made reading this paragraph difficult. Listen for students to notice that the reason your paragraph was unclear to them as readers was that there were no conventions used. Explain that writers use conventions, or writing rules, to make their message clear and understandable to readers.
- Remind students that they have already focused on the conventions for writing dialogue, but today they will review other conventions and edit their writing so that it is clear and understandable to readers and ready for final publication.

**Meeting Students’ Needs**
- Allow students to discover the topic of this lesson through trying to read your convention-less paragraph. This will help to engage students’ interest in editing for conventions.

### B. Reviewing Learning Targets (5 minutes)
- Invite students to take out their copies of the **Choose-Your-Own-Adventure Narrative Rubric** and read the criteria box for Conventions to themselves:
  - “I can use correct spelling in my writing.”
  - “I can use correct conventions in my writing.”
- Remind students that conventions are rules for writing. Go on to remind students that they recently learned the conventions, or rules for writing dialogue. Review the following with students in the “Conventions” section of the rubric:
  - Meets: “I have no misspelled words in my writing. This includes homophones and common affixes,” “I correctly use capitalization in my writing, I correctly use commas and quotation marks to identify speech and quotations from a text, and I can choose correct punctuation for ending my sentences.”
- Ask students what they know already about these targets. Give students a chance to talk with a partner about their thinking and then cold call students using **equity sticks**. Students should recall revising for capitalization and spelling in their explanatory introductions in Lesson 1 of this unit, as well as learning about affixes, homophones, and dialogue in this unit and in Unit 2.
- Then ask students to identify parts of the learning targets that are unfamiliar or confusing. Pay particular attention to the meanings of the words **homophones, affixes, capitalization, punctuation**, and **dialogue** as you clarify the meaning of the targets with students.
### Work Time

#### A. Chalk Talk (10 minutes)
- Point out the four stations to students. Read the **Conventions anchor chart** at each station:
  - How do I make sure my **SPELLING** is correct?
  - What are the conventions for **DIALOGUE**?
  - How do I know if my **ENDING PUNCTUATION** is correct?
  - How do I know if my **CAPITALIZATION** is correct?
- Tell students that they will be doing a **Chalk Talk** to share their thoughts on each question. Give brief directions:
  - Go to your assigned chart first.
  - Read the question on the chart.
  - Add your thoughts on the question to the chart using the **markers** at the station.
  - Visit all charts to read the questions and your classmates’ answers. Decide if something is missing from a chart and, if so, add it using the markers at that station.
  - Once you have visited every chart, sit in your seat.
- Give students time to visit each chart, read, and add their thoughts (less than 10 minutes total).
- Focus students whole group. Revisit each chart with students. (Either gather all of the charts, or as a class, circulate each chart so all students can see it.)
- Read a few responses from each chart and circle or add important tips for each question. Make sure to check for accuracy in punctuation and capitalization rules, and add helpful hints with spelling (remember common homophones, affixes, and root words; use a dictionary).
- Tell students that they will use these Conventions anchor charts later in this lesson.

### Meeting Students’ Needs
- This protocol could be confusing for ELL students if it is their first time. Consider reviewing the protocol with these students ahead of time. Another way to support students is to give them a copy of abbreviated directions with visuals to help guide them.
### Work Time (continued)

**B. Model: Editing for Conventions (5 minutes)**
- Display the convention-less paragraph. Use the first few sentences of your paragraph to model. Demonstrate how to edit for each convention by circling or underlining with the correct colored pencil (see Teaching Notes above). Be sure to model referring to the Conventions anchor charts as resources (posted at each station).
- For example: Read the SPELLING chart. Read aloud your convention-less paragraph. Notice a mistake and think aloud: “I notice that I have a homophone here, *threw*. I think I might have used the wrong spelling of this word.” Then demonstrate editing the mistake: “So I am going to circle it with a colored pencil from this station and then I will remember to check the spelling of this word when I revise later.”
- Address any clarifying questions.

**C. Editing Stations (20 minutes)**
- Ask students to get out their second draft of their choose-your-own-adventure narrative (homework from Lesson 11).
- Tell students that they are going to go to all four stations to get help from peers to improve their draft. Give directions:
  - Count off or choose one station to begin work.
  - At that station, trade papers with your peer critique partner.
  - Read your partner’s revised draft and identify any convention mistakes related to the topic of that station’s chart.
  - When both partners are finished, move to the next station.
- Be sure to get to all four stations.

---

**Meeting Students’ Needs**

- When you model editing for students, remember that you are just showing them how to identify and note mistakes, not revise them. They will have an opportunity for revising their mistakes in Lesson 14.
- Be sure students are editing their revised drafts from Lesson 11. The drafts should be clean with no annotations from previous lessons.
## Closing and Assessment

<table>
<thead>
<tr>
<th>A. Preparing for the End of Unit 3 Assessment (15 minutes)</th>
<th>Meeting Students’ Needs</th>
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</thead>
<tbody>
<tr>
<td>• Ask students to thank their partners and return to their seats.</td>
<td>• If students need more time to plan choice two of their narratives to prepare for the assessment, consider assigning this as additional homework or allow additional time for this during the school day.</td>
</tr>
<tr>
<td>• Post the <strong>Performance Task anchor chart</strong> (from Unit 1, Lesson 1) and <strong>Steps for Planning and Drafting My Narrative anchor chart</strong> (from Lesson 4).</td>
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<tr>
<td>• Review the anchor charts with students and remind them that tomorrow they will write the second choice of their narrative for the end of unit assessment.</td>
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<tr>
<td>• Tell students that they will prepare for the assessment by planning this choice today.</td>
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<tr>
<td>• Ask students to get out their <strong>Expert Group Animal Narrative Planning graphic organizer</strong> (from Lesson 5) and their <strong>Expert Group Animal research journals</strong>.</td>
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<tr>
<td>• Remind them that they have already identified the defense mechanism their animal will use for Choice #2 in their stories, and that the main documents they will need will from their research journals will be the the Close Reading Guide (from Unit 2, Lessons 2 and 3) and Research note-catchers (from Unit 2, Lessons 4 and 5).</td>
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<tr>
<td>• Give students the rest of the lesson to independently plan Choice #2 of their narratives.</td>
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## Homework

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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<tbody>
<tr>
<td>• Complete a final sketch for the cover of your narrative on your Performance Task Template.</td>
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</table>

*Note: To prepare for Lesson 14, review students’ edited drafts. Add additional edits as needed. Remember to add only edits that pertain to the conventions edited in class.*
Use this or write your own convention-less paragraph for modeling.

i am very pleesed with how my class has learned so much about animal defences when we first started we new very little about but over the last severel weeks we have come very far i have a frend named lisa and the other day she asked how do your students know so much about animal defences i said they became expert researchers threw reading and writing wow she said i bet you are happy and proud to yep i said i am
Grade 4: Module 2B: Unit 3: Lesson 13
End of Unit Assessment: Writing Choice #2 of the Choose-Your-Own-Adventure Narrative
GRADE 4: MODULE 2B: UNIT 3: LESSON 13
End of Unit Assessment: Writing Choice #2 of the Choose Your Own Adventure Narrative

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can write narrative text about real or imagined experiences or events. (W.4.3)
I can produce writing that is appropriate to task, purpose, and audience. (W.4.4)
I can use conventions to send a clear message to my reader. (L.4.1g, L.4.2a, b, and d, and L.4.3b)

Supporting Learning Targets | Ongoing Assessment
--- | ---
- I can write Choice #2 for my choose-your-own-adventure animal defense mechanisms narrative. | - End of Unit 3 Assessment: Writing Choice #2 of the choose-your-own-adventure animal defense mechanisms narrative
- | - Tracking My Progress, End of Unit 3 recording form
### Agenda

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<table>
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<tr>
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<tbody>
<tr>
<td>1. Opening</td>
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<tr>
<td></td>
<td>A. Popcorn Read (5 minutes)</td>
</tr>
<tr>
<td></td>
<td>B. Reviewing Learning Targets (5 minutes)</td>
</tr>
<tr>
<td>2. Work Time</td>
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<tr>
<td></td>
<td>A. End of Unit 3 Assessment: Writing Choice #2 of the Choose-Your-Own-Adventure Narrative (45 minutes)</td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Tracking My Progress (5 minutes)</td>
</tr>
<tr>
<td>4. Homework</td>
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<tr>
<td></td>
<td>A. Continue reading in your independent reading book for this unit at home.</td>
</tr>
</tbody>
</table>

### Teaching Notes

- In this assessment students have 45 minutes to plan and write Choice #2 of their choose-your-own-adventure animal defense mechanisms narratives based on the assessment prompt.
- However, keep in mind that 45 minutes may not be enough time for some students to edit and revise for conventions. Consider providing additional time in the beginning of the following lesson, before publication, for these students to edit and revise their work.
- They will use the Choose-Your-Own-Adventure Narrative Rubric to guide their work and will be assessed based on that rubric.
- In advance:
  - Ensure that students have all of their writing materials (organized before the beginning of this assessment). This will give students more time to focus on their planning and writing.
**Lesson Vocabulary**

- encounter, outcome

**Materials**

- Choose-Your-Own-Adventure Narrative Rubric (from Lesson 3; one per student and one to display)
- Characteristics of Narratives anchor chart (from Lesson 4)
- Performance Task anchor chart (from Unit 1, Lesson 1)
- Steps for Planning and Drafting My Narrative anchor chart (from Lesson 4)
- Expert Group Animal Narrative Planning graphic organizer (from Lesson 5; added to in Lesson 12; one per student)
- Lined paper
- End of Unit 3 Assessment: Writing Choice #2 of Choose-Your-Own-Adventure Animal Defense Mechanisms Narrative (one per student)
- Tracking My Progress, End of Unit 3 recording form (one per student)
- Performance Task template (students’ copies from previous lessons, for homework)
## Opening

### A. Popcorn Read (5 minutes)

- Invite students to take out their **Choose-Your-Own-Adventure Narrative Rubrics**. Explain to students that they will use the Popcorn Read protocol to help synthesize their understanding the rubric and prepare for their End-of-Unit 3 Assessment.
- Post and discuss the criteria for a good Spirit Read ahead of time:
  - Read short phrases or words only, not sentences.
  - Give no commentary or opinions.
  - Try to connect with what was just read (listen carefully to others).
  - Give all voices a chance.
  - Pauses can be powerful.
  - Repeating phrases is allowed (shows where a group collectively agrees).
- Invite students to form a circle.
- Have students count off one to four. Tell students that ones will focus on the “Ideas” portion of the rubric, twos “Word Choice,” threes “Organization,” and fours “Conventions.”
- Give students a minute to reread their assigned rows of the rubric and underline a word or phrase that stands out to them.
- Invite students to begin the protocol. Remind students that when one person reads a word or phrase, the other students should look for a phrase they’ve underlined that matches or connects in some way with the phrase they’ve just heard. This process continues until there are no more phrases students want to share aloud (until there are no more “kernels left to pop.”)

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reviewing the rubric based on the learning targets outlined from the standards allows students to envision a clear picture of what meeting these targets will look like as they write their narratives.</td>
</tr>
</tbody>
</table>

### B. Review Learning Targets (5 minutes)

- Introduce the learning target for this lesson:
  
  * “I can write Choice #2 for my choose-your-own-adventure animal defense mechanisms narrative.”

- Remind students that they have learned much about animal defense mechanisms, researched their own animal, studied the structure of good narratives, and practiced writing their own narratives, so they are well prepared for today’s assessment.
**Opening (continued)**

- Ask students to Think-Pair-Share for a moment about the steps they took in crafting the first choice of their narrative. Call on a few students to share the steps they took. Listen for students to recall the following steps:
  - Planning based on research
  - Drafting
  - Critique and feedback
  - Revising
  - Editing
- Tell students that they will complete these steps again in one sitting for this assessment, but they will not receive critique and feedback this time around. Explain that they should instead review the feedback given by you and their partners on the drafts of Choice #1 of their narratives.

**Work Time**

### A. End of Unit 3 Assessment: Writing Choice #2 of the Choose-Your-Own-Adventure Narrative (45 minutes)

- Have students gather their materials:
  - Choose-Your-Own-Adventure Narrative Rubric
  - Expert Group Animal Narrative Planning graphic organizer (added to in Lesson 12)
  - Lined paper
- Explain that they should also use the Choose-Your-Own-Adventure Narrative Rubric as a guide for their writing.
- Distribute the *End of Unit 3 Assessment: Writing Choice #2 of the Choose-Your-Own-Adventure Animal Defense Mechanisms Narrative*. Read it aloud to the class as students read along in on their copy. Address any clarifying questions (you may wish to confirm that students know the meaning of the word *encounter* and *outcome* in the prompt).
- Prompt students to begin by reviewing or adding to their Expert Group Animal Narrative Planning graphic organizers.
- After 15 minutes, remind them to reread their drafts and check them against the rubrics as they continue to write.

**Meeting Students’ Needs**

- Forty-five minutes might not be enough time for some students to edit and revise for conventions. Consider providing additional time in the beginning of the following lesson before publication for these students to edit and revise their work.
### Closing and Assessment

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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<tbody>
<tr>
<td><strong>A. Tracking My Progress (5 minutes)</strong></td>
</tr>
<tr>
<td>• Distribute Tracking My Progress, End of Unit 3 recording form. Explain to students that, as usual after assessments, they will reflect on their learning. Remind them that they have lots to reflect on: They have spent several weeks reading, researching, and writing about animal defense mechanisms.</td>
</tr>
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</table>

### Homework

<table>
<thead>
<tr>
<th>Meeting Students’ Needs</th>
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</thead>
<tbody>
<tr>
<td>• Add sketches for both Choice #1 and Choice #2 of your narrative to your Performance Task template showing the defense mechanism your animal uses in each choice. In your captions, describe the defense mechanism your animal uses and how it can help your animal to survive.</td>
</tr>
</tbody>
</table>

*Note: Make photocopies of students’ End of Unit 3 Assessment writing so that you can score them. Then in Lesson 14 give students back their original writing from this assessment. This will allow students to publish the entire narrative for their performance task while you continue to read and score this assessment.*

*The PARCC Draft of Extended Rubric for Analytic and Narrative Writing is included in the supporting materials for this lesson for your reference. It has been modified to fit this module’s specific content focus and to be in more student-friendly language.*
End of Unit 3 Assessment:
Writing Choice #2 of the Choose-Your-Own-Adventure Narrative

Name:

Date:

Directions:
1. Read the prompt below.
2. Review your research.
3. Review the Choose-Your-Own-Adventure Narrative Rubric.
4. Plan Choice #2 of your narrative using the graphic organizer.
5. Write Choice #2 of your narrative on a separate sheet of lined paper.
6. Reread your narrative and make any needed revisions based on the rubric.

Prompt:
Write Choice #2 for your choose-your-own-adventure animal defense mechanisms narrative. Describe how your animal uses another defense mechanism (different from Choice #1) during an encounter with a predator and the outcome. Use details and examples from your research to develop your narrative, including concrete words, phrases, and sensory details to convey your animal’s experiences.
Learning Target: I can write Choice #2 for my choose-your-own-adventure animal defense mechanisms narrative.

1. The target in my own words is:

2. How am I doing? Circle one.

   I need more help to learn this.  I understand some of this.  I am on my way!

3. The evidence to support my self-assessment is:
Grade 4: Module 2B: Unit 3: Lesson 14
Publishing the Choose-Your-Own Adventure
Animal Defense Mechanisms Narrative
### Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

I can write narrative text about real or imagined experiences or events. (W.4.3)
I can use grammar conventions to send a clear message to a reader or listener. (L.4.1, L.4.2)
I can express ideas using carefully chosen words. (L.4.3)
With support, I can use technology to publish a piece of writing. (W.4.6)

### Supporting Learning Targets

<table>
<thead>
<tr>
<th>Supporting Learning Targets</th>
<th>Ongoing Assessment</th>
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<tbody>
<tr>
<td>• I can publish my choose-your-own-adventure animal defense mechanisms narrative.</td>
<td>• Choose-your-own-adventure animal defense mechanisms narratives (final copy)</td>
</tr>
<tr>
<td>• I can write a positive comment after reading a classmate’s writing.</td>
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### Agenda

<table>
<thead>
<tr>
<th></th>
<th>Teaching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Opening</td>
<td>• This lesson is largely dependent upon students having access to a computer, an online dictionary, and a printer. If students have already had time to word process their second draft on a computer, the timing of this lesson will work well. If students have not yet started word-processing, consider giving students additional time to type their final copies.</td>
</tr>
<tr>
<td>A. Reviewing Learning Targets (5 minutes)</td>
<td>• If technology is not available in sufficient numbers for your class, consider modifying this lesson to use standard print dictionaries and focus on students using neat handwriting to create a published copy of their narratives, using the Performance Task template (version 1 in Lesson 1).</td>
</tr>
<tr>
<td>2. Work Time</td>
<td>• Depending on pace, students may need additional time for publishing. To provide this time, you may wish to move the Writer’s Gallery in the closing of this lesson to another day.</td>
</tr>
<tr>
<td>A. Modeling: Using Technology to Publish (5 minutes)</td>
<td>• In advance:</td>
</tr>
<tr>
<td>B. Independent Work and Conferring (35 minutes)</td>
<td>– Prepare the Steps for Publishing My Narrative chart (see supporting materials).</td>
</tr>
<tr>
<td>3. Closing and Assessment</td>
<td>– To celebrate students’ learning during the Writer’s Gallery in the closing of this lesson, consider creating a festive mood in the classroom: soft music, maybe some sparkling cider, perhaps a banner congratulating the writers on their publication. You may consider inviting parents or other adults from the school to share in the celebration of students’ learning.</td>
</tr>
<tr>
<td>A. Writer’s Gallery (15 minutes)</td>
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</table>
## Lesson Vocabulary

<table>
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<tr>
<th>publish, positive, comment</th>
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## Materials

- The technology to allow students access to a computer screen, word-processing software, the internet, and printer
- LCD projector
- Computers for students
- Printer and paper
- Choose-Your-Own-Adventure Narrative Rubric (from Lesson 3)
- Steps for Publishing My Narrative anchor chart (new; teacher-created; see supporting materials)

## Opening

### A. Reviewing Learning Targets (5 minutes)

- Introduce the first learning target only: “I can publish my choose-your-own-adventure animal defense mechanisms narrative.”
- Circle the word *publish* and ask students to turn to a partner and share what they think this word means. Call on a few students to share their partners’ thinking. Ask students:
  - “What reference resources can you use to check your thinking?”
- Some answers might be: a dictionary, Google, peers, or the teacher. Tell them that today they will be using a computer both as a reference source and to publish their narratives.
### Work Time

#### A. Modeling: Using Technology to Publish (5 minutes)
- Ask students to sit where they can see the projection of your computer. Let students know that today is the day they prepare their work to make it public—in other words, “publish” it.
- Project a Web site such as www.dictionary.com or www.wordcentral.com. Tell students that you are going to use this online resource to check their thinking about the word *publish*. Type the word “publish” into one of the online dictionaries and read the definitions. Have students turn to a partner and explain what it means to *publish* their writing. Have a few pairs share their thinking.
- Please bear in mind that Youtube, social media video sites, and other website links may incorporate inappropriate content via comment banks and ads. While some lessons include these links as the most efficient means to view content in preparation for the lesson, be sure to preview links, and/or use a filter service, such as www.safeshare.tv, for actually viewing these links in the classroom.
- Set purpose: Remind students that they will be sharing their published narratives with an audience—their classmates. Tell them that in order to publish their choose-your-own-adventure narratives, they need to be sure everything is complete and correct. Today they will have time to polish their writing, including both Choice #1 and Choice #2 from the End of Unit 3 Assessment in Lesson 13.
- Demonstrate how to use the online dictionary to identify misspellings. Show students how to scroll down and check for possible correct spellings by checking the definitions.
- Ask students to get out their *Choose-Your-Own-Adventure Narrative Rubrics*.
- Post the **Steps for Publishing My Narrative** chart:
  - Read your draft and correct conventions based on editing notes.
  - Check your narratives one last time using the Choose-Your-Own-Adventure Narrative Rubric.
  - Rewrite your draft to include the corrections and revisions.

#### B. Independent Work and Conferring (35 minutes)
- Have students move to a computer to begin work following the Steps for Publishing My Narrative chart.
- Confer with students as needed and when they decide they are finished.
- When students indicate they are finished, ask them to add a footer to their paper with their full name. This avoids confusion when students print their papers.

### Meeting Students’ Needs
- If using a conventional printed dictionary, you might want to review searching for a word using alphabetical order.
- If possible, expand the audience to include others who are not a part of the class (e.g., teachers, principal, parents, other classes). This can be motivating and exciting for students. See recommendations for the Writer’s Gallery Teaching Notes.
- Some students who have difficulty spelling might have a hard time finding the correct spellings for severely misspelled words. Keep these students in mind for conferencing during this time.
- Depending on pace, students might need additional time for publishing. If this is the case, consider extending this portion of the agenda and move the Writer’s Gallery in closing to another day.
Help them to assemble their narratives and to include their cover and sketches from the Performance Task Template (version 1, from Lesson 1) to prepare for the Writer’s Gallery.
A. Writer’s Gallery (15 minutes)
• Introduce the second learning target for this lesson, “I can write a positive comment after reading a classmate’s writing.”
• Tell students that today they will celebrate their work as writers of choose-your-own-adventure narratives with a Writer’s Gallery. Praise all the reading, research, and writing they have done to learn about animal defense mechanisms and publish their narratives. Congratulate them on their perseverance and creativity.
• Explain to students that during the Writer’s Gallery, they will have an opportunity to read another classmate’s narrative and leave a positive comment about that work. Share the first learning target: “I can write a positive comment after reading a classmate’s writing.” Remind students that they have been practicing giving kind and helpful feedback to their writing partners, but today they will focus only on what they think the writer did well in the work they read.
• Explain the meaning of the phrase positive comment and remind them that comments that are specific and kind will be more meaningful than comments such as “This is good.” Tell students that once they have read another’s work, they will write the positive comment on a sticky note and leave it on their desk.
• Assign each student another student’s work to read. Post the following directions for students to follow for the Writer’s Gallery:
  1. Clear your desk and put your narrative on top.
  2. Go to your assigned author’s desk.
  3. Read his or her narrative.
  4. Leave a positive comment.
  5. Go to an open desk and repeat Steps 3–5.
• Explain that they will not get to read all the stories in the class but should have time to read at least one, if not two or three.
• Let them know that the Writer’s Gallery is silent so everyone can read without distraction.
• Once time is up, ask students to go back to their desks and read their positive comment(s).
• Congratulate them on a job well done.

Meeting Students’ Needs
• Another variation on this type of sharing is to have students form small groups and take turns reading their work out loud. The group can record one comment after each reading and feedback can be given once all students have shared. Then students can read the comments written for them by their group members. This variation gives students an opportunity to practice reading their own writing aloud but is not as efficient.

Homework
• None.
Steps for Publishing My Narrative Chart

**Teacher Directions:** Prepare a chart paper with the following directions for students.

**Steps for Publishing My Narrative:**

1. Read your draft and correct conventions based on editing notes.
2. Check your narratives one last time using the Choose-Your-Own-Adventure Narrative Rubric.
3. Rewrite your draft to include the corrections and revisions.