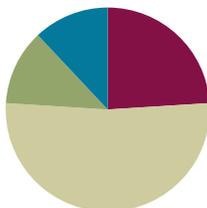


Lesson 6

Objective: Identify the attribute of weight by describing objects as heavy or light.

Suggested Lesson Structure

■ Fluency Practice	(6 minutes)
■ Application Problem	(3 minutes)
■ Concept Development	(13 minutes)
■ Student Debrief	(3 minutes)
Total Time	(25 minutes)



Fluency Practice (6 minutes)

- Tally Objects **PK.CC.3a** (4 minutes)
- Say Ten Basketball **PK.CC.1** (2 minutes)

Tally Objects (4 minutes)

Materials: (S) Bags of up to 10 objects, blank piece of paper to use as a recording sheet

Note: This activity maintains students' ability to tally objects, which was taught in the previous module. Providing students with this additional practice fosters efficiency and improves students' ability to count and record quantities with tallies.

1. Distribute bags and a pencil to each student.
2. Have them line up the objects, count them, and record the quantity in tallies.
3. Have them exchange with another student for a different number of objects.

There are many opportunities for differentiation: number of objects, choice of writing instruments, and grouping of students (independent, partner, or small group with support from the teacher). Students who are not ready for writing, or who require a more concrete experience, can tally with craft sticks.

Say Ten Basketball (2 minutes)

Note: Counting the Say Ten Way facilitates rote counting to 20 by the end of Pre-Kindergarten.

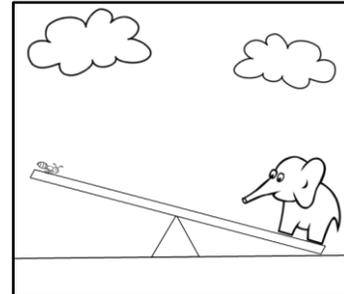
As in Lesson 4, students bounce an imaginary ball 15 times, once for each number: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, ten 1, ten 2, ten 3, ten 4, ten 5.

Application Problem (3 minutes)

Materials: (T) Seesaw picture (Template 1)

Show students the picture of the elephant and the ant on a seesaw. Encourage sharing about what they know about seesaws by asking questions such as, “Where have you seen them?” “Have you ever ridden one?” “How do they work?” Then, ask students to think about and share why the elephant is down low and the ant is way up high.

Note: Allowing students to uncover and analyze connections between real-world experiences and math concepts, such as *heavy* and *light*, deepens their understanding of these concepts when they are formally introduced. It also provides insight into students’ prior knowledge of *heavy* and *light* and anticipates work with the balance scale in Lesson 8.



Concept Development (13 minutes)

Part 1: Concept Introduction

Materials: (T) Box of heavy and light items, enough for each student (e.g., feather, brick, pencil, big book, stuffed animal), 2 hula hoops or circles made of string for sorting objects

Note: When preparing the heavy and light items, include things that are big but light (a big piece of foam or an empty shoe box). Also include things that are small but heavy (a bag of marbles or a small bottle of water).

1. Pull a brick out of the box of heavy and light things. Say, “This is a brick. When I pick it up, it feels **heavy** (playfully exaggerating how heavy it is by lowering arms to the ground). I am going to put it in this hula hoop to make a group of heavy things.”
2. Call on a student to pick another item from the box. Use parallel talk to guide students to identify the object, describe it as heavy or **light**, and sort it into the correct group.
3. Repeat until all the items have been identified as heavy or light and have been sorted.
4. Say, “We made a group of heavy things (pointing to the group) and a group of light things (pointing to the group). *Heavy* and *light* tell us about their **weight**.”
5. Say, “We are going to look for some more heavy and light things at our tables.”



NOTES ON MULTIPLE MEANS OF ACTION AND EXPRESSION:

Facilitate student analysis. Use parallel talk to model questioning and encourage analysis of group collage choices. For example, “Why did you choose to place the car on the heavy collage?” “Why didn’t you choose to put the book on the heavy collage?” After examples of model questions, encourage students to analyze their own work or other group members’ work using the modeled questions.

Part 2: Practice

Materials: (S) Magazines, newspapers, or weight collage (Template 2), 2 or 4 pieces of butcher paper with large circles drawn on them labeled *heavy* and *light*, crayons, glue, scissors

Note: To facilitate cutting out pictures, preselect pages from magazines or portions of a newspaper that have heavy and light items (e.g., cars, insects, leaves, food items). Rip the pages from the magazine, or cut the newspaper into manageable pieces, and spread them out on the tables. Place heavy and light items on both tables so that students reason about weight as they make their collages.

MP.3

1. Depending on class size, divide students into 2-4 groups. Direct students to sit with their small group at a table.
2. Say, “Find or draw pictures to put on your group paper that show heavy things (pointing to the group) or light things (pointing to the group).”
3. Provide work time. For their group sort, allow students to cut out pictures or draw items from the ones sorted during the Concept Introduction. Lead a discussion: “Which pictures were tricky to sort on your chart? Did you have any disagreements?”
4. Provide groups with time to revise their sort and to move some pictures from heavy to light, or vice versa.

Student Debrief (3 minutes)

Lesson Objective: Identify the attribute of weight by describing objects as heavy or light.

The Student Debrief is intended to invite reflection and active processing of the total lesson experience. It is also an opportunity for informal assessment. Consider taking anecdotal notes or using a simple checklist to note each child’s progress toward meeting the lesson objective.

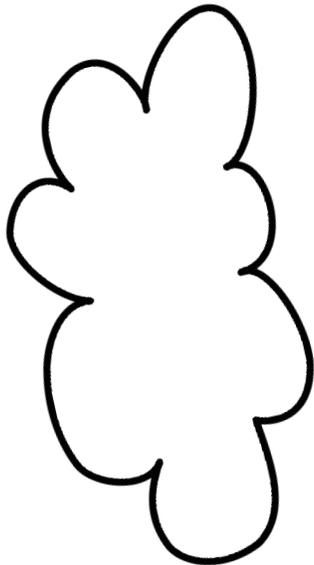
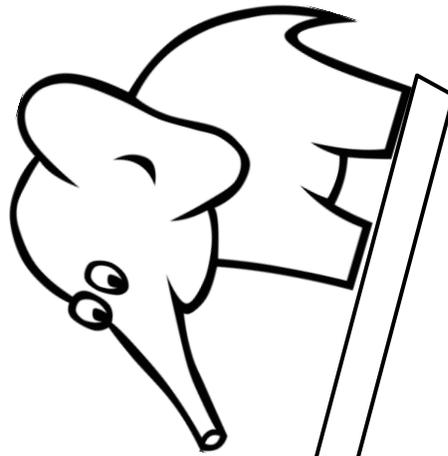
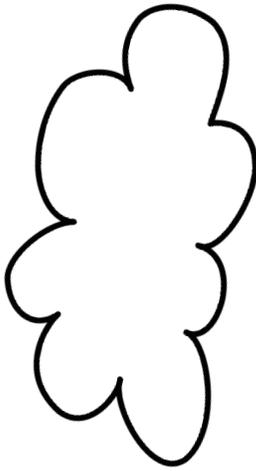
As students complete the Practice portion of the Concept Development, listen for misconceptions or misunderstandings that can be addressed in the Debrief.

Any combination of the questions below may be used to help students express ideas, make connections, and use new vocabulary (**heavy**, **light**, **weight**).

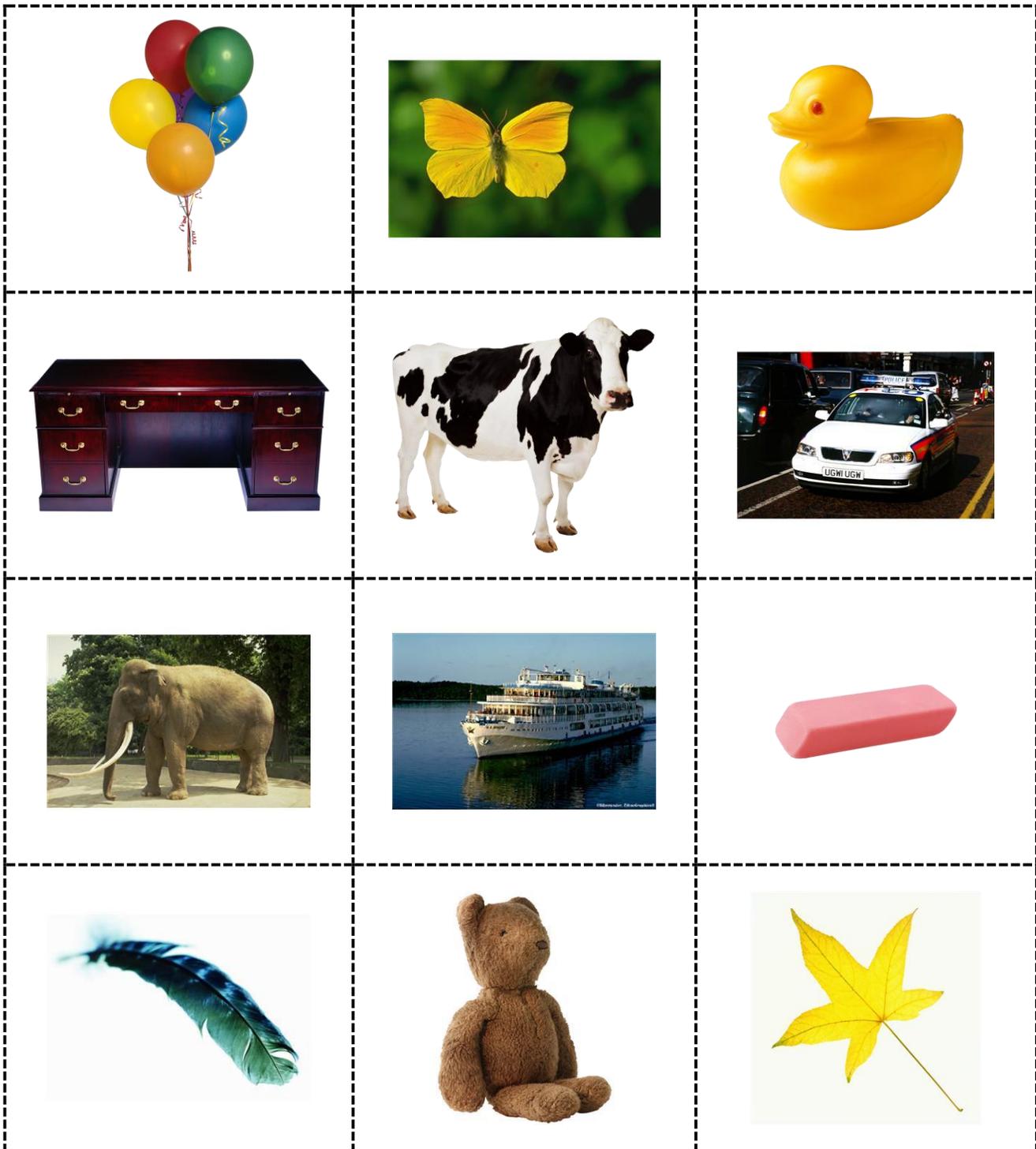
- What new words did we learn today? Can you use them to tell about these things (e.g., car, ring, pencil, feather, desk)?
- If one of you sat on a seesaw, and then I sat on the other end, which one of us would go up in the air, and which one of us would stay on the ground? Why?
- When you sorted objects as **heavy** or **light**, were all the heavy objects big and all the light objects small?
- Can something that is heavy get lighter? Can something that is light get heavier?
- What would Superman think was heavy? What would a baby think was heavy? Can the same object be light to one person and heavy to another?

**CENTER CONNECTION:**

Place weight collage templates, crayons, and paper at the art table. Allow students to draw or cut out pictures to make their own collage or simply to make a scene with heavy and light objects. As always, listen for students using appropriate or new vocabulary when they are working in a non-structured setting.



seesaw picture



weight collage