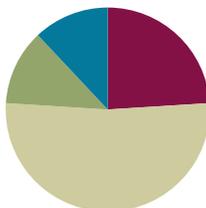


Lesson 15

Objective: Identify first and last in a circular configuration with 2–10 objects.

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)

- Merry-Go-Round **PK.CC.4** (4 minutes)
- Number Cha-Cha **PK.CC.1** (2 minutes)

Merry-Go-Round (4 minutes)

Materials: (S) Dice, a counter or sticker to mark the starting point

Note: Counting in circular configurations prepares students for today's Concept Development.

1. Gather students in the meeting area in rows.
2. Roll a die.
3. Have that number of students come to the front and arrange themselves in a circular formation to ride on the *merry-go-round*.
4. Place the counter or sticker on the rug to mark the starting point.
5. Have students go for a ride on the merry-go-round (walking in a circle, moving up and down as if they are on a merry-go-round).
6. When the ride is finished (teacher picks a good stopping point), have students decide who will be first and last in the count (based on where the sticker or counter is placed).
7. Play again as time allows.

Number Cha-Cha (2 minutes)

Materials: (T) Instrumental music with a cha-cha beat (optional)

Note: This activity expands students' rote counting skills and challenges them to develop fluidity in the counting sequence. The movements facilitate memorization and get everyone moving.

Similar to Lesson 1, students attach the counting sequence to dance steps, extending the count to 15 if ready:

- 1 (hand out), 2 (other hand out), 3, 4, 5 (stepping in place rhythmically).
- 6 (hand out), 7 (other hand out), 8, 9, 10 (stepping in place rhythmically).



NOTES ON MULTIPLE MEANS OF REPRESENTATION:

Students who are ready to count beyond 10 begin by counting the Say Ten Way (ten 1, ten 2, and so on) because it allows students to directly relate their known counting to 10 to counting to 20. While students also leave

Pre-K counting to 20 the regular way, the Say Ten Way supports number sense and lays the foundation for place value understanding in future grades.

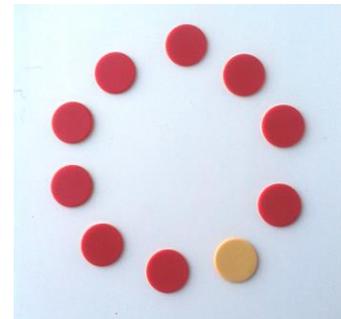
If extending the count beyond 10 for the number cha-cha, use a slower beat to allow the Say Ten Way.

Application Problem (3 minutes)

Materials: (S) Bag of 9 counters with 1 of a different color (or shape) per pair of students

Pair students at tables, and distribute 10 counters per pair. Invite students to imagine that their counters are friends playing *Duck, Duck, Goose*. Instruct Partner A to arrange the counters in a circle. Then, instruct Partner B to count how many friends are playing, beginning the count with the different colored counter. Switch roles and play again with a different number of counters, reminding students to always include the different counter.

Note: This activity supports the strategy of identifying *first* to count accurately when objects are arranged in a circular configuration.



Concept Development (13 minutes)

Part 1: Concept Introduction

Materials: (T) Stuffed animal

1. Separate the class into 2 groups, and have each group sit in a circle. Say, "Hmmm... I wonder how many students are in each of my circles. I'm going to count each one of you so I can find out."
2. Dramatize walking around the circle, counting all of the students. Don't stop counting until students start to protest and say stop.
3. Say the inaccurate number: "There are ____ students in this circle!" Allow students to challenge the statement and discuss the reasons why they think the statement is incorrect.

MP.3

MP.3

- Acknowledge the mistake and ask for suggestions to count the students in the circle accurately. Students might respond as follows: “Give something to the first person so you know to stop when you get there.” “We could all get in a line; that would make it easier to count.”
- Say, “Let me try again. This time, when I start counting, I will give the first person I count this stuffed animal. Count with me.”
- Count all of the students, stopping right before getting to the stuffed animal. Have the first and last students counted exclaim, “I am first” or “I am last.”
- Repeat several times, changing the position of the stuffed animal.

Part 2: Practice

Materials: (S) Circle of rocks (Template), 10 teddy bear counters

Place a template and 10 teddy bear counters at each student’s seat.

- Say, “Our bears are playing *Duck, Duck, Goose* in a circle today! Put the bears on the rocks.”
- Say, “Point to the first bear you put on a rock and say, ‘This is the first bear.’ Point to the last bear put on a rock and say, ‘This is the last bear.’”
- Ask, “How many bears are playing *Duck, Duck, Goose* on the rocks?” Let students count independently. Observe counting strategies. Suggest strategies to struggling students.
- Once students are finished, ask again, “How many bears are playing on the rocks?” If there are different answers, ascertain why by watching students with different answers count.
- To close the practice, remove all of the bears from the tables. Say, “Let’s count the rocks!” As students realize that they can’t move the rocks as they did the bears, encourage other strategies using what they have learned about first and last.



Note: The teacher may wish to draw students’ attention to the grass around the rocks as one means of accurately keeping track of the count.

Student Debrief (3 minutes)

Lesson Objective: Identify first and last in a circular configuration with 2–10 objects.

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.

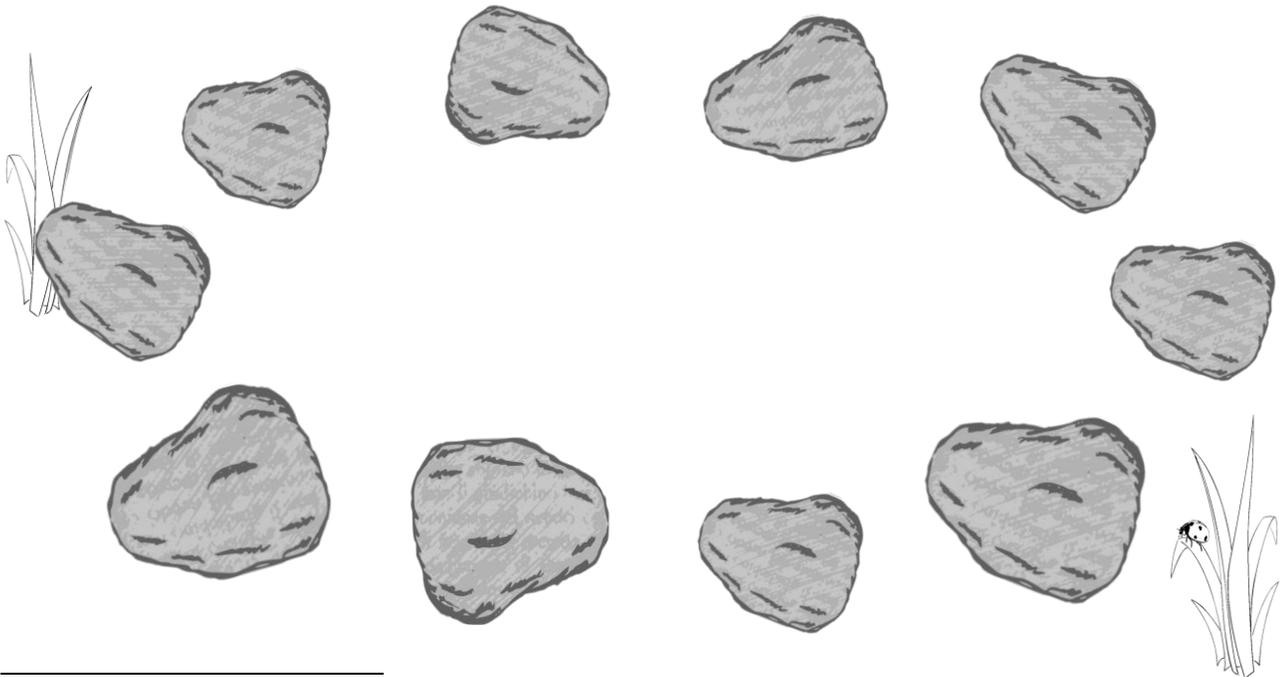
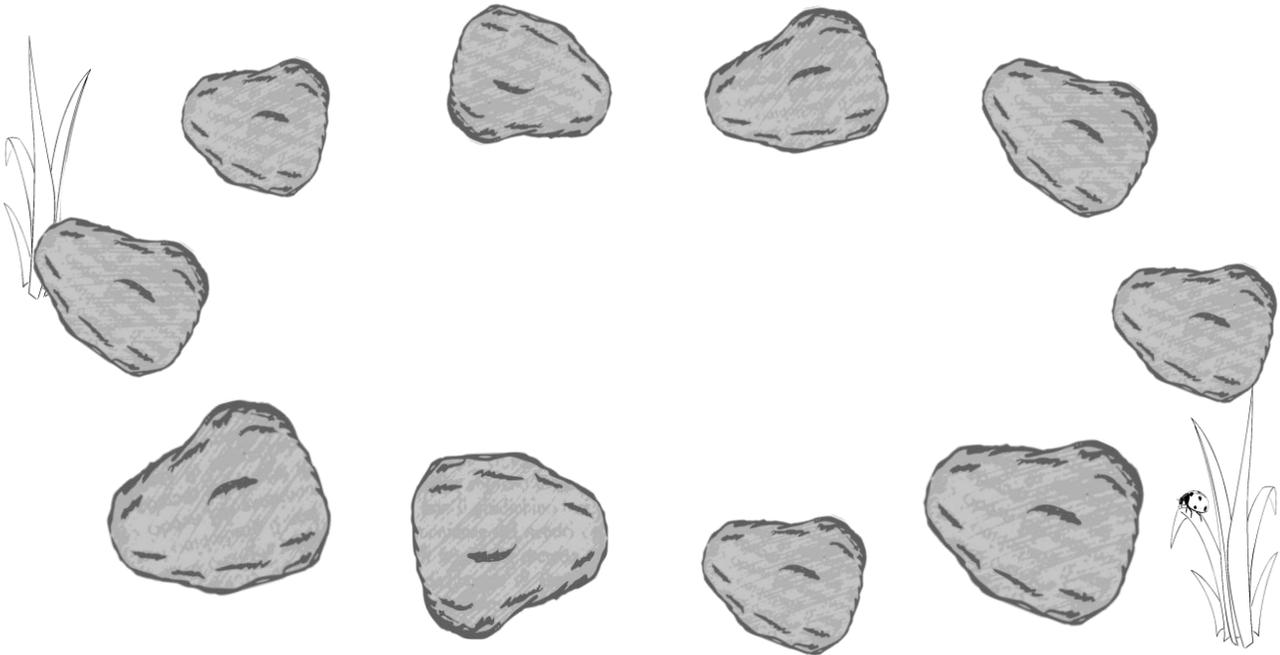
As students complete the Practice portion of the Concept Development, listen for misconceptions or misunderstandings that can be addressed in the Debrief.

Any combination of the questions below may be used to help students express ideas, make connections, and use new vocabulary.

- Is it easier to keep track of the first object when things are arranged in a line or circle? Why?
- How did the different counters and stuffed animal help you count when things were arranged in a circle?
- When you play *Duck, Duck, Goose*, can anyone be first? Last? How close together are the first and last people? Is it different when people are in a line?
- What are some other ways that could help you keep track of where you started when you count objects in a circle?

**CENTER CONNECTION:**

Place 4–10 beans and small paper plates on a table at the center. Let students explore by placing beans around the edge of the small paper plate. Encourage students to strategize about how to count the beans around their plate. Ask them how they know they didn't miss any beans when they counted. Ask them how they know they didn't count any beans twice.



circle of rocks