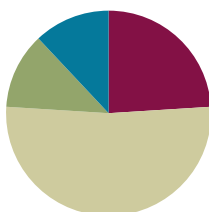


## Lesson 4

**Objective:** Identify, analyze, sort, compare, and position circles.

### Suggested Lesson Structure

Fluency Practice	(6 minutes)
Application Problem	(3 minutes)
Concept Development	(13 minutes)
Student Debrief	(3 minutes)
<b>Total Time</b>	<b>(25 minutes)</b>



### Fluency Practice (6 minutes)

- Count the Rectangles **PK.CC.3a** (3 minutes)
- Count the Corners **PK.CC.3a** (3 minutes)

### Count the Rectangles (3 minutes)

Materials: (S) Baggie containing shape cutouts (Lesson 1 Template 2)

Note: Observe whether students first sort to make a group of rectangles or simply remove the rectangles one by one from the bag and count them as they do so. Early finishers can count the number of shapes that are not rectangles or that have no corners.

Have students count the number of rectangles in their bags.

### Count the Corners (3 minutes)

Materials: (T) 5-corner shape (Fluency Template), 5 beans

Note: This activity reinforces rote counting to 5 while guiding students to reason quantitatively about how many corners a rectangle has.

T: Count the corners of this shape for me as I mark them with a bean.

S: (Place beans as they count.) 1 corner, 2 corners, 3 corners, 4 corners, 5 corners!

T: This shape has five corners. Is this shape a rectangle?

S: No!

T: You are correct because we learned yesterday that a rectangle has 4 corners!

Next, remove a bean and ask, “How many corners have a bean?” Pause to give time to count, and then ask, “How many corners do not have a bean?” Playfully repeat the activity, taking beans off and putting beans on.

**Application Problem (3 minutes)**

Materials: (T) Rectangle cutouts (Lesson 1 Template 2), non-examples of rectangles (Lesson 3 Template), including squares (1 per student)

Give each child a shape. Create a line in the center of the carpet or circle. Designate one side for rectangles and the other side for “not rectangles.” Students sort themselves based on their shapes. Ask individuals, “How did you know this was a rectangle?” or “How did you know this wasn’t a rectangle?” Once sorted, have children hop once for each corner or side of the shape they are holding.

Note: Use this as an opportunity to help children share what they know about rectangles. Some children may recognize the shape because it does or does not “look like a rectangle.” Others may talk about sides and corners. Support children to see that the square belongs on the rectangle side of the line because it has four corners and four straight sides.

**Concept Development (13 minutes)****Part 1: Concept Introduction**

Materials: (T) Circle cutouts (Lesson 1 Template 2), non-examples (Lesson 4 Template), tape or magnets, small basket or container

Prior to the lesson, cut out all shapes.

1. Say, “Today, we’re going to explore another shape!” Show students a circle to guide them as they discover a circle’s defining characteristics.
2. Say, “Tell me about this shape.” Encourage students to talk about circles: “They go around and around.” “They are not straight.”
3. Guide students to notice that a circle has no straight sides and no corners. Say, “We call this shape a **circle**. I’m going to put the circle on the board.”
4. Examine more circles (big and small), and affix each circle to the board at varying positions relative to each other. Notice that the size and position do not matter.
5. Model the position words **behind**, **in front of**, and **between** with the help of students. Ask one student to hold a circle *behind* his back. Have another student hold a shape that is not a circle *in front of* her body. Ask two students to come up so that a circle can be held *between* them.
6. Hold up an oval: “Tell me about this shape.” Guide students to see that there are no straight sides or corners. “This is like a circle, but it is squished. A circle rolls like a wheel, but this wouldn’t roll very well.” Put the oval in the basket for all other shapes.
7. Continue discussing and sorting shapes as circles and not circles.

**Part 2: Practice**

**Materials:** (T) Tree mat (Lesson 2 Template 2); small stuffed animal; 1 circle, 1 rectangle, and 1 triangle cutout (S) Per pair: tree mat (Lesson 2 Template 2); small stuffed animal, puppet, or doll; 1 circle, 1 rectangle, and 1 triangle cutout (Lesson 1 Template 2)

Prepare tables with student materials listed above, and then gather students in a circle to model the activity.

1. Show students the tree mat, the stuffed animal (e.g., a little giraffe), and a circle. Say, “Let’s play our game! Watch and listen carefully to what I say as I move my circle on the mat with the little giraffe.”
2. Use the words *behind*, *in front of*, and *between* as you move the circle.
  - I’m putting a circle behind the giraffe.
  - I’m putting a shape that is not a circle between the tree and the giraffe.
  - I’m putting a shape that is not a circle in front of the tree.
3. Send partners to their seats and say, “Now it’s your turn! Listen carefully as I tell you and your partner where to move your shapes. Lead students to repeat the statements, e.g., “I put the circle between the tree and the giraffe.”


**NOTES ON  
MULTIPLE MEANS  
OF ENGAGEMENT:**

Students who struggle with position words benefit from practice with concrete manipulatives or their own bodies throughout the day. For example, ask students to get in line *behind*, *in front of*, or *between* another student, or suggest that students put objects *behind*, *in front of*, or *between* other materials when cleaning up.

**Student Debrief (3 minutes)**

**Lesson Objective:** Identify, analyze, sort, compare, and position circles.

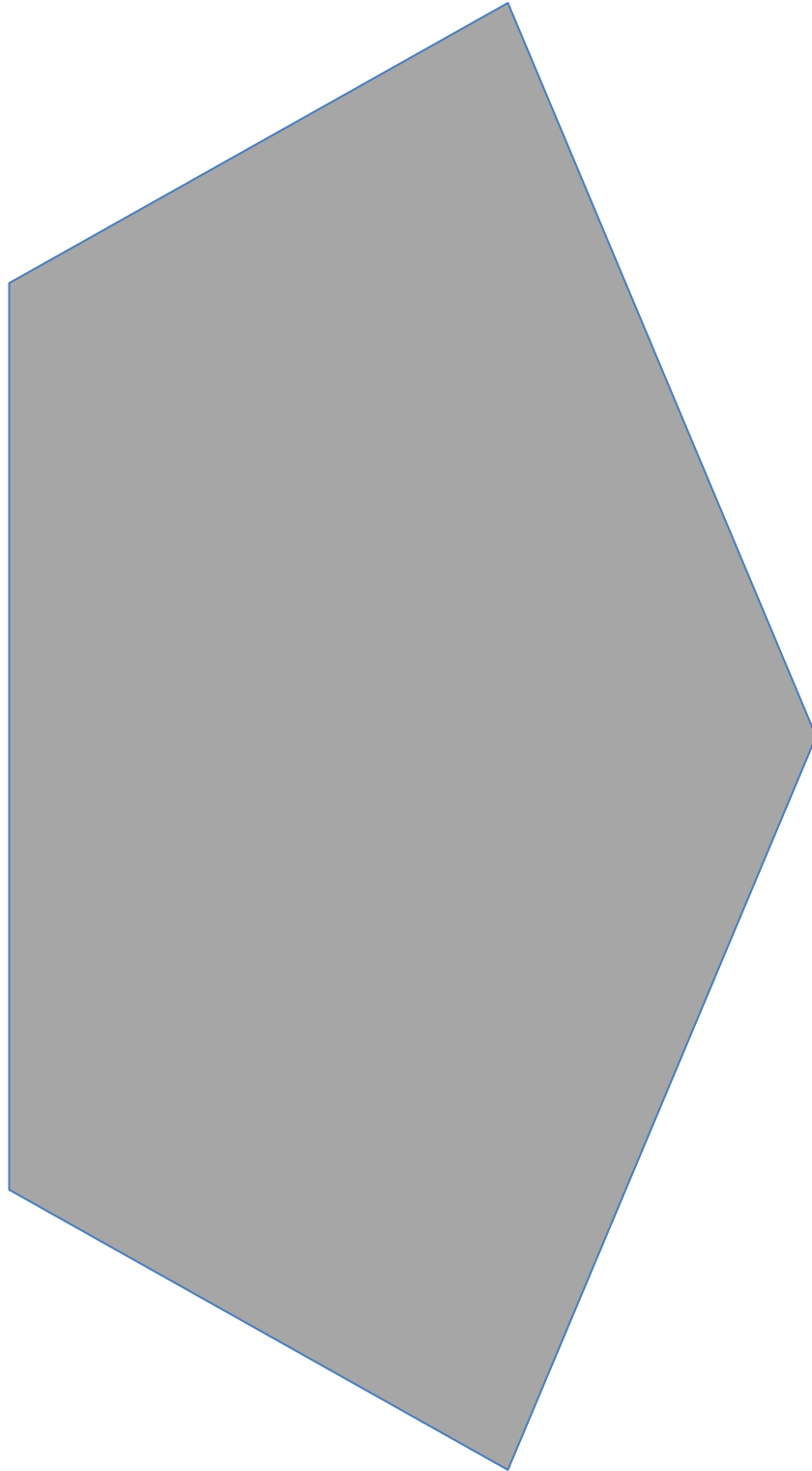
The Student Debrief is intended to invite reflection and active processing of the total lesson experience. It is also an opportunity for informal assessment. Consider taking anecdotal notes or using a simple checklist to note each child’s progress towards meeting the lesson objective.

As students complete the Practice portion of the Concept Development, listen for misconceptions or misunderstandings that can be addressed in the Debrief. You may choose to use any combination of the questions below to help students express ideas, make connections, and use new vocabulary (**circle, behind, in front of, between**).

- What new shape did we talk about today?
- How is a circle different from a rectangle?
- (Show an oval.) How is this the same as and different from a circle?
- What new position words did we use to talk about where we put our circle today?

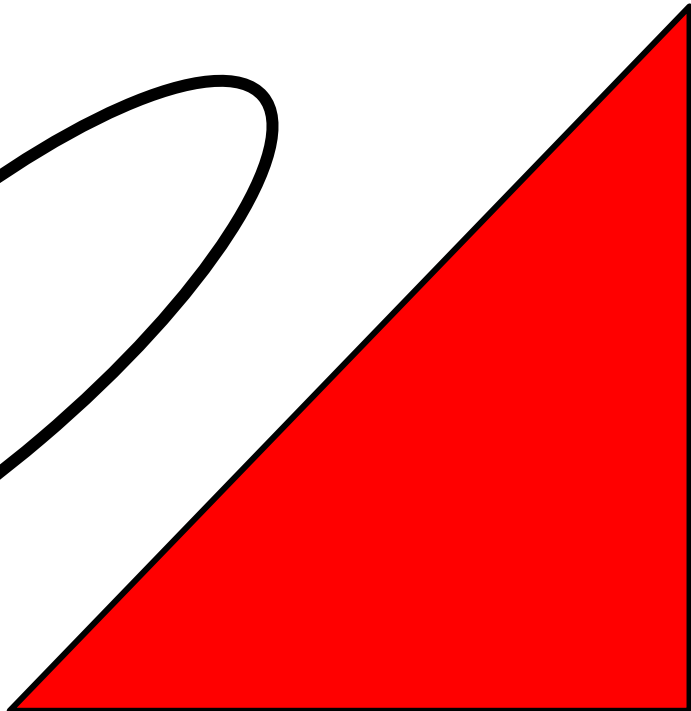
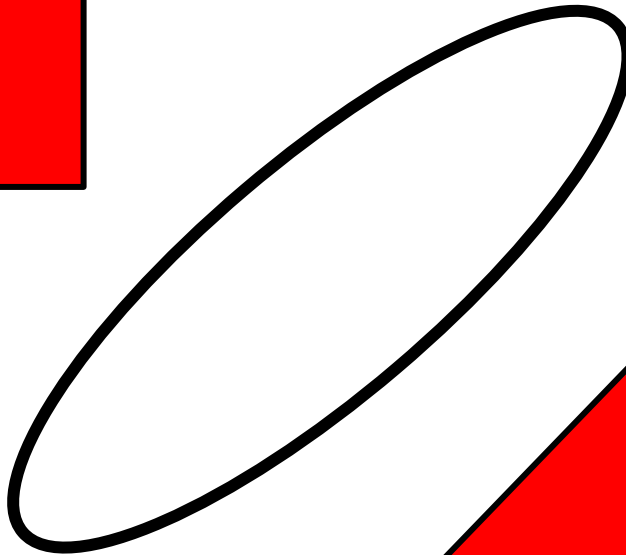
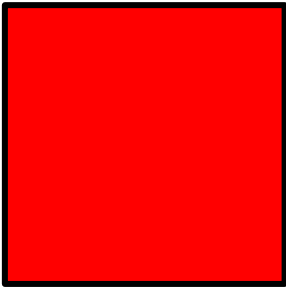
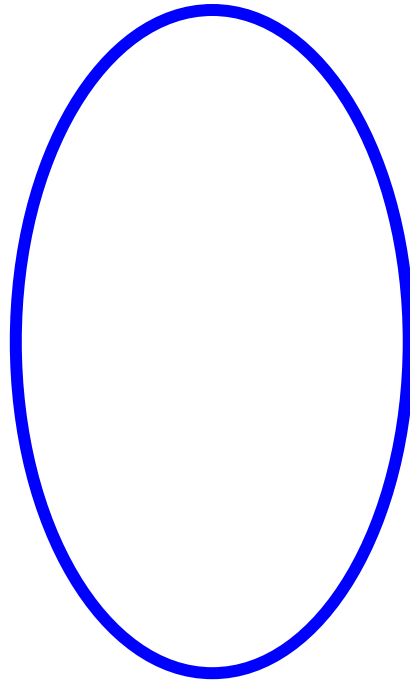
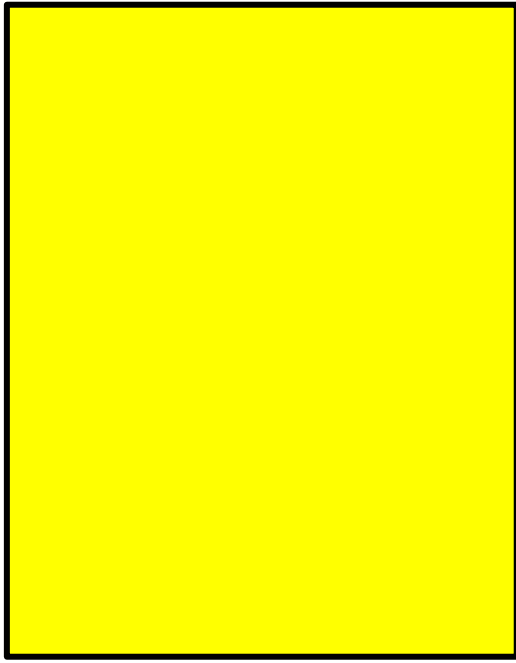

**CENTER CONNECTION:**

In the sensory center, have children stamp circles into sand or clay using buttons, plastic bowls, container tops, and other round items from around the classroom. As a challenge, use an item to stamp and then see if children can figure out which item made the circle.



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5-corner shape



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circle non-examples