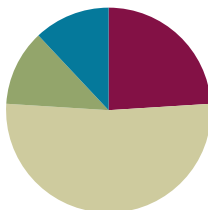


Lesson 3

Objective: Identify, analyze, sort, compare, and position rectangles and squares.

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)

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

Count the Triangles (3 minutes)

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

Note: Observe whether students first sort to make a group of triangles or simply remove the triangles one by one from the bag and count them as they do so. Early finishers can count the number of shapes that are not triangles or that have four corners.

Have students count the number of triangles in their bag.

Count the Corners (3 minutes)

Materials: (T) Rectangle cutouts (Lesson 1 Template 2), 4 beans

Note: The four corners of a rectangle are emphasized by placing a bean on each one preparing students to focus on the attributes of a rectangle in the lesson. This activity also gives students experience with comparing corners of a triangle and a rectangle.

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!

T: This shape has four corners. Is this shape a triangle?

S: No!

T: You are correct, because we learned yesterday that a triangle has three corners!

Next, remove a bean and ask, “How many corners have a bean?” and then, “How many corners do not have a bean?” Playfully take beans off and put beans on. Repeat the same process using different rectangles oriented in different ways (without naming the shape as a rectangle.)

Application Problem (3 minutes)

Materials: (T) Triangle cutouts (Lesson 1 Template 2), non-examples of triangles (Lesson 2 Template 1)

Give each child a shape. Create a line in the center of the carpet or circle. Designate one side for triangles and the other side for “not triangles.” Students sort themselves based on their shapes. Ask individuals, “How did you know this was a triangle? How did you know this wasn’t a triangle?”

Note: Use this as an opportunity to help children share what they know about triangles. Some children may know because it does or does not “look like a triangle.” Others may talk about sides and corners.

Concept Development (13 minutes)

Part 1: Concept Introduction

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

Prior to the lesson, cut out all shapes.

MP.6

1. Show students a rectangle and say, “Tell me about this shape.” Guide students to notice that it has four straight sides and four corners. Say, “We call this shape a **rectangle**,” and affix it to the board.
2. Choose more rectangles (long and narrow, or short and wide), and say, “Tell me about this shape.” Guide students to see that each rectangle has four straight sides and four corners.
3. Affix each rectangle to the board at varying angles and in varying positions relative to each other, using the words **above**, **below**, and **next to**. “I’m putting the rectangle next to the other rectangles. They all have four sides and four corners.”
4. Say, “What’s on your feet?” Lead the discussion to realize that we can identify a group of objects with a word such as *shoes* but the objects in that group can also have special names such as boots, sneakers, or sandals.
5. Show a **square**. Ask, “Does this shape have four sides and four corners?” “Yes, it is a rectangle!” Then ask, “Does anyone know another special name for this shape?” Discuss that a square is a special rectangle because all sides are the same length.
6. Affix a triangle to the board, and ask, “Is this a rectangle?” Put the triangle in the basket for other shapes. Continue putting only rectangles on the board and all other shapes in the basket.



NOTES ON MULTIPLE MEANS OF REPRESENTATION:

Position words are often difficult for students. Students who are struggling would benefit from a template that models the correct position.

MP.6

7. Continue discussing and sorting shapes as rectangles and not rectangles, guiding students to identify rectangles and squares, by saying, “It is a rectangle because rectangles have four straight sides and four corners.”

Part 2: Practice

Materials: (T) 1 rectangle, small stuffed animal (S) Per pair: 1 rectangle, small stuffed animal (or puppet or doll)

Before sending students to prepared tables, gather them in a circle to model the activity.

1. Show students the stuffed animal and a rectangle. “Let’s play a game! Watch and listen carefully to what I say as I move my rectangle around the little giraffe.”
2. Use the words **above**, **below**, and **next to** as you move the rectangle around the giraffe.
 - I’m holding a rectangle above the giraffe.
 - I’m putting the rectangle below the giraffe.
 - I’m putting a rectangle next to the giraffe.
3. Send partners to their seats and say, “Now it’s your turn! Listen carefully as I tell you where to put your shapes. Lead students to repeat the statements, e.g., “I put the rectangle below the animal.”

**Student Debrief (3 minutes)**

Lesson Objective: Identify, analyze, sort, compare, and position rectangles and squares.

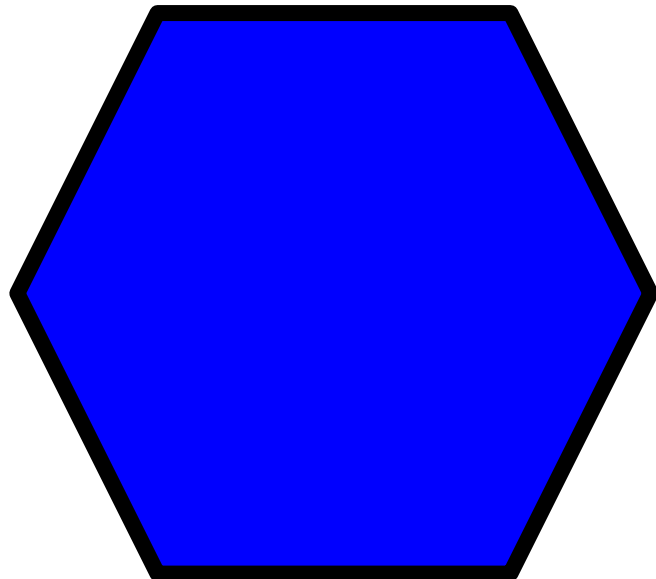
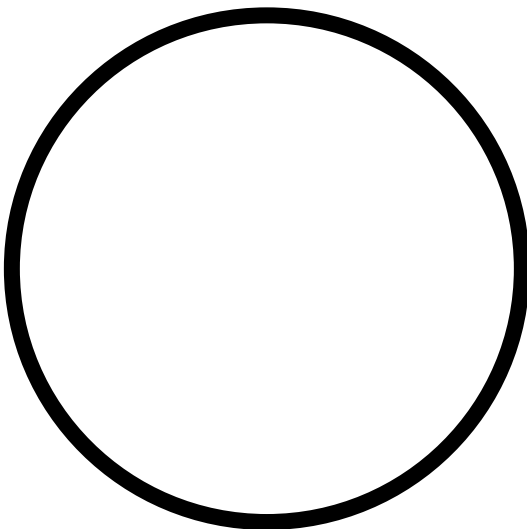
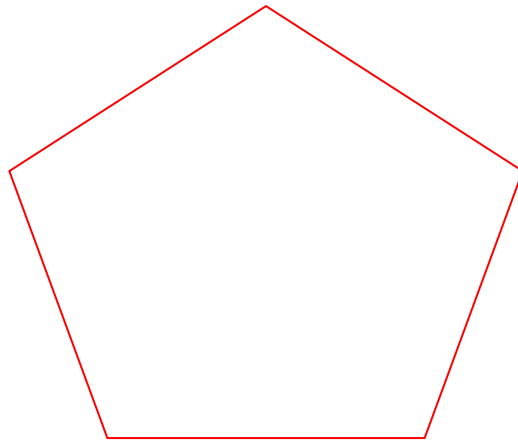
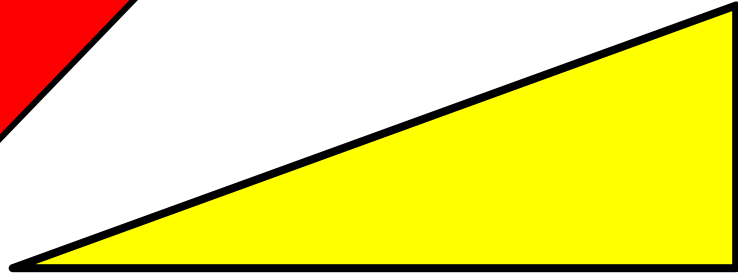
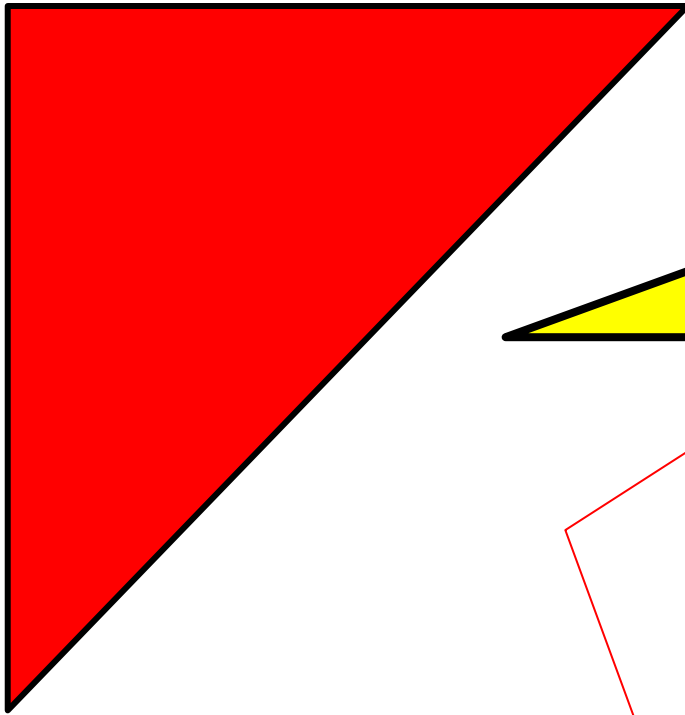
The Student Debrief is intended to invite reflection and active processing of the total lesson experience. It is also an opportunity for informal assessment. Consider taking anecdotal notes or using a simple checklist to note each child’s progress towards meeting the lesson objective.

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 (**rectangle**, **square**, **above**, **below**, **next to**).

- What new shapes did we talk about today?
- What new position words did you use to talk about where you put your shapes around the stuffed animal?
- (Show a variant of a rectangle.) What shape is this? How many sides and corners does it have?
- (Show a square and rectangle.) Why are these both rectangles? What makes this one a square too?

**CENTER CONNECTION:**

Place assorted construction and tissue paper shapes in the art center. Invite children to find all of the rectangles (including the special rectangles, squares) and make a collage using those shapes.



rectangle non-examples