

Objective

Identify the positions *inside* and *outside*.

Common Core State Standards

- **K.G.1** Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*.

Geometry

Inside and Outside

The position of any object can be described as *inside* or *outside* a given location. An object is *inside* a location if it is within the boundaries of the location. An object is *outside* a location if it is not within the boundaries of the location. Identifying the position of an object in three-dimensional space is one of the most basic descriptive steps in geometric thinking. This skill sets the stage for identifying locations such as over, under, and on. Later, this skill will help children understand measurements such as length and area.

Try It! Perform the *Try It!* activity on the next page.

Talk About It

Discuss the Try It! activity.

- **Ask:** *How are inside and outside different?*
- **Ask:** *Where is inside the circle? Where is outside the circle?*
- **Ask:** *Which shapes did you put inside the circle? Which shapes did you put outside the circle?* Encourage children to use the names of the shapes.
- If a child places an Attribute Blocks shape on the circle, point out that part of the block is inside, and part of it is outside. Also, remind children that they can use other positional words to describe where one block is in relation to other blocks.

Solve It

With children, reread the problem. Ask children to draw a circle to show the basket in the problem. Then have them draw where the ball could have landed in order for Kevin to score 1 point.

More Ideas

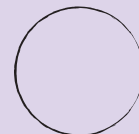
For other ways to teach about *inside* and *outside*—

- Have children draw shapes on sheets of paper and place Snap Cubes® inside or outside the shape.
- Have children describe the location of Three Bear Family® Counters that are inside and outside a cup.
- Have pairs of children place Attribute Blocks inside and outside Sorting Circles based on their attributes. For example, have pairs put shapes with four corners outside the Sorting Circle and shapes with three corners inside it.

Formative Assessment

Have children try the following problem.

Draw a square inside the circle. Then draw a triangle outside the circle.



Try It!

30 minutes | Pairs

Here is a problem demonstrating the positions *inside* and *outside*.

At recess, Mrs. Miller introduced the children to a new game called Ball Toss. If a ball lands inside the basket, you score 1 point. If a ball lands outside the basket, you score 0 points. When Kevin threw the ball, he scored 1 point. Where did the ball land?

Introduce the problem. Then have children do the activity to solve the problem.

Distribute Attribute Blocks and Attribute Sorting Circles to pairs. Tell children that they will be learning about the words *inside* and *outside*.

Materials

- Attribute Blocks
- Attribute Sorting Circles (1 per pair)



1. Direct children to look around the classroom and notice things that are inside or outside of other things. You may want to hold up a container of blocks and tell children that the blocks are inside the container. Next, take out a block and tell children that this block is outside the container.



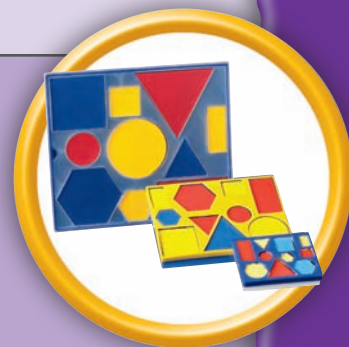
2. Have pairs place a Sorting Circle in front of them. Tell children that objects also can be inside or outside a flat circle. Demonstrate by placing a block triangle inside a Sorting Circle. **Say:** *The triangle is inside the circle.* Demonstrate putting a block outside the circle as well. Then invite one child in each pair to take a block and place it on the desk either inside or outside of the circle.



3. The other child will describe the location of the block using the word *inside* or *outside*. Invite children to take turns setting down the blocks and telling where they are placed. Encourage children to use the correct vocabulary for the shapes they are using.

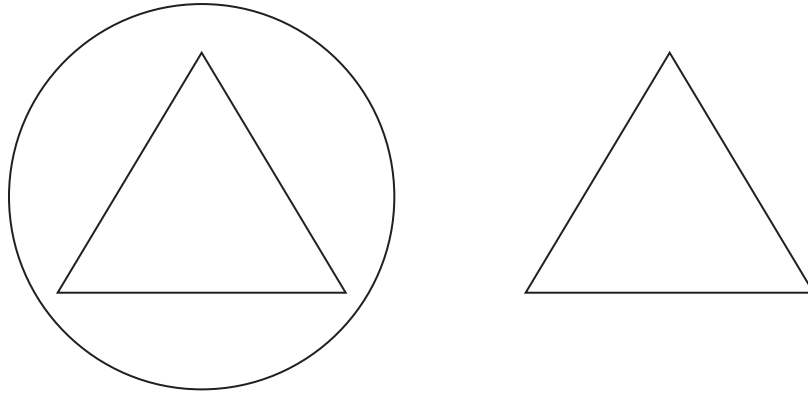
Look Out!

Watch for children who confuse the words *inside* and *outside* because they sound alike. Remind children that they go outside the school for recess and come back inside the school when recess is over. Connect this idea to the activity by using counters. Have children move the counters outside the Sorting Circle for "recess." Then have children return the counters to the circle.

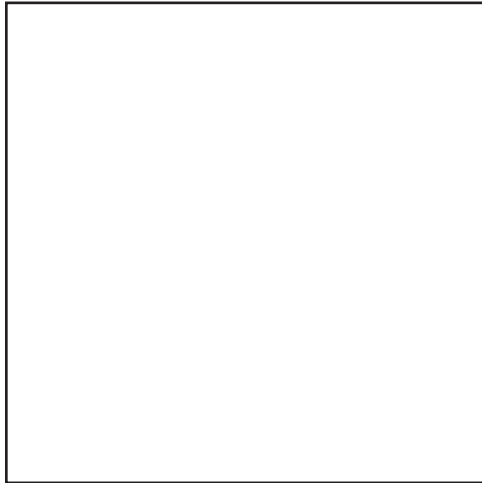


Check children's work.

1.



2.



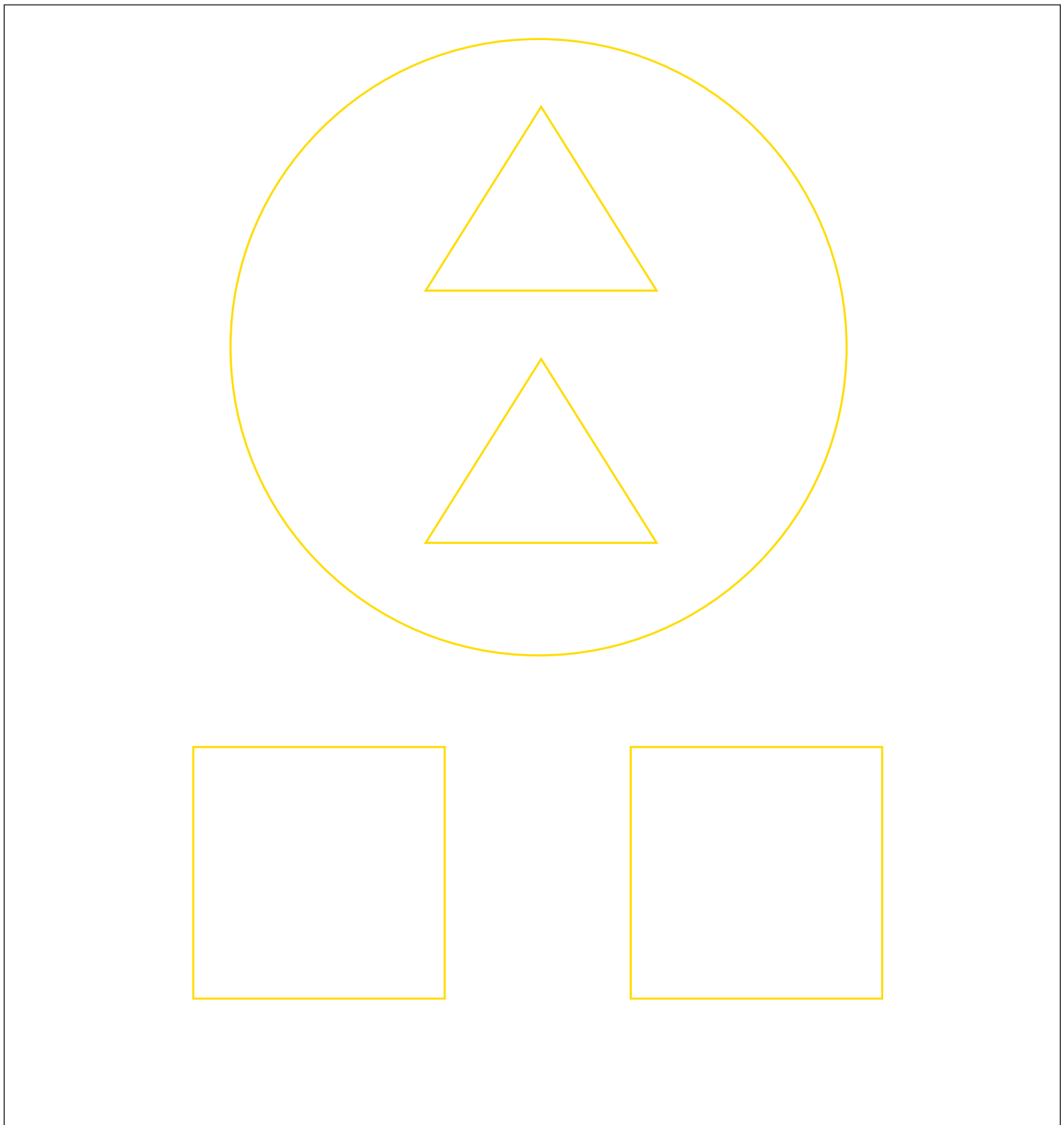
Directions

1. Color the shape outside the circle blue. Color the shape inside the circle yellow. 2. Draw a heart inside the box. Draw a fish outside the box.



Answer Key

Check children's work.



Challenge

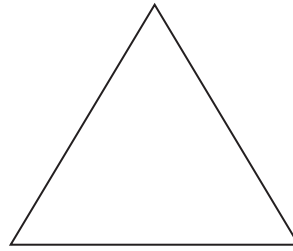
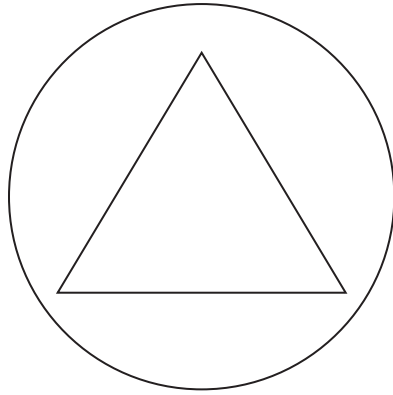
Draw a large circle. Draw two squares outside the circle. Draw two triangles inside the circle.

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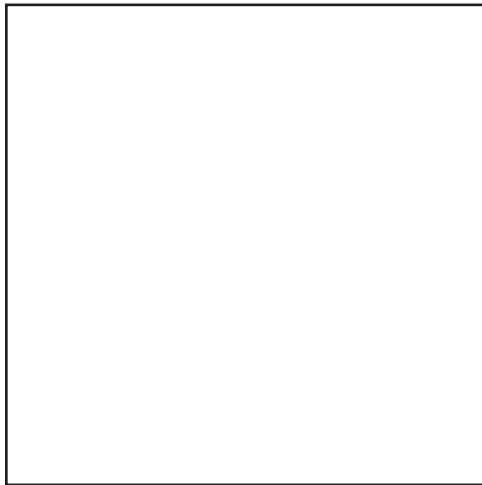


Name _____

1.



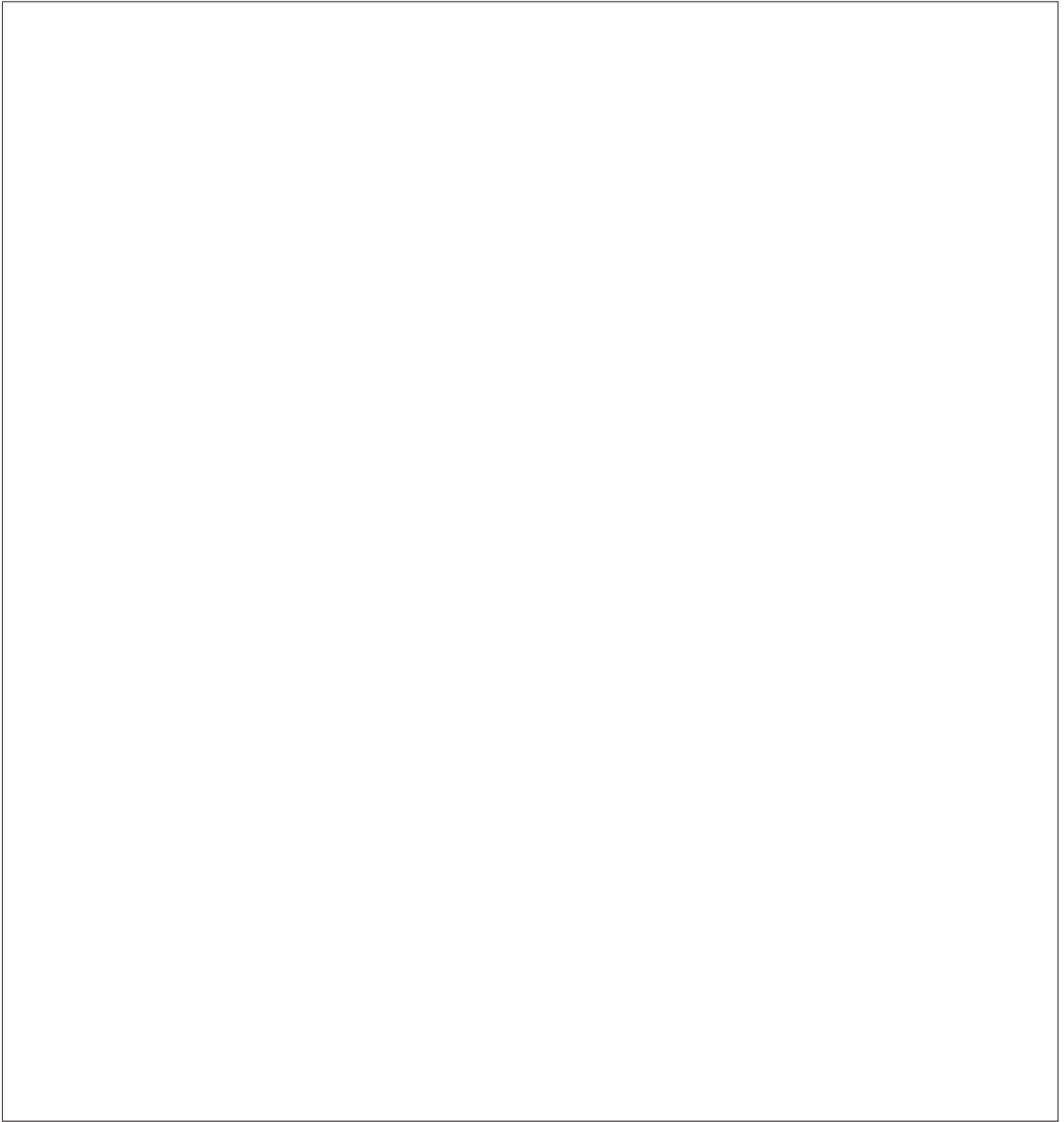
2.



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Name _____



Challenge

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