

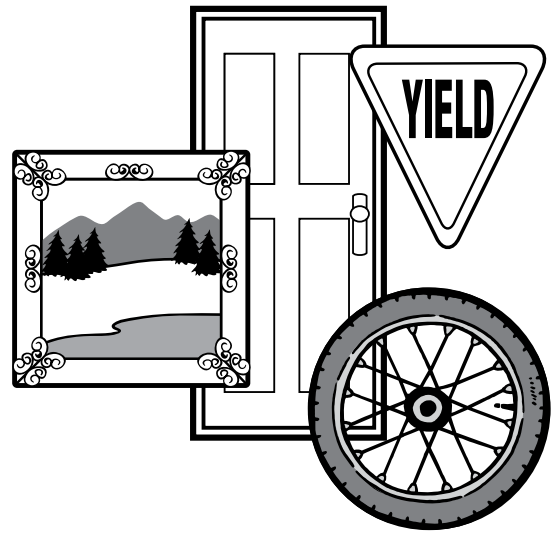
Shape Study

Preschool–Kindergarten

Objectives

CCSS Math/Geometry: K.G.1, K.G.2, K.G.3

- Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders and spheres).
 1. Describe objects in the environment using the 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*.
 2. Correctly name shapes regardless of their orientations or overall size.
 3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).



Materials Needed

- *Mouse Shapes* by Ellen Stoll Walsh
- Shape Hunt recording sheets
- Document camera or whiteboard (optional)
- Safety Scissors - Dozen [GS454Z]
- Lakeshore Jumbo Glue Sticks - Dozen [TT506Z]
- Shapes template
- Construction Paper (white and a variety of colors) [TA50]
- 3-D Geometric Shapes Tub [EE498]
- Giant Magnetic Geometric Shapes [EE924]
- Shape & picture cards
- Shape sorting mat
- Zip-close plastic bags
- Pencils

Products with item numbers are available at LakeshoreLearning.com.

Preparation

1. Print out several copies of the shapes template onto different colors of construction paper. (You may also want to cut out the shapes ahead of time for younger students.)
2. Print out copies (either double-sided or on separate sheets) of the Shape Hunt recording sheets for each student.

Introduction

1. Read aloud *Mouse Shapes* by Ellen Stoll Walsh.
2. Ask students to describe what the mice in the story did with the shapes. Have students point back to the story for examples of shapes used to make the objects that the mice hid from the cat.

Procedure

1. Using the Giant Magnetic Geometric Shapes and/or the 3-D Geometric Shapes Tub, hold up each of the following shapes: circle, square, rectangle, triangle, hexagon, cube, cone, cylinder and sphere.

2. As you hold each shape, have student volunteers identify it and help define the characteristics of that shape. (For example, a student could say, "A triangle has three sides and three corners.") If you are using geometric solids (cube, cone, cylinder and sphere), point out the three-dimensional attribute of these shapes and how they are different from the two-dimensional plane shapes. (For example, a three-dimensional solid like a cube has depth, and a two-dimensional square is flat.)
3. Repeat this activity with each shape, encouraging students to share their observations in order to define the shape's attributes. If you are using 3-D shapes, invite students to identify each shape as two-dimensional (flat) or three-dimensional (solid).

Guided Practice

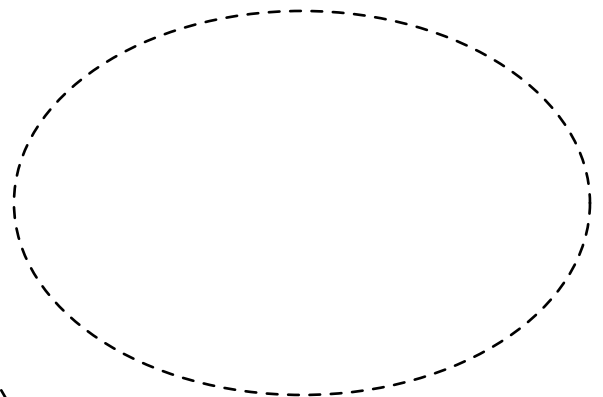
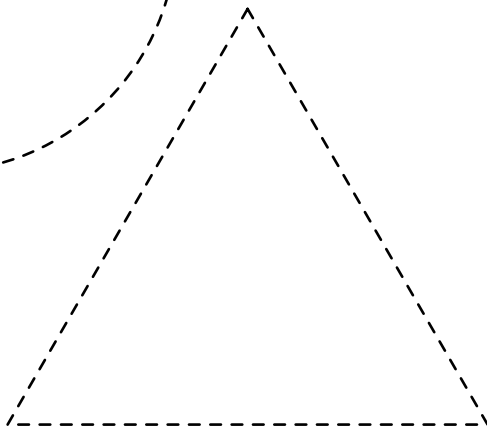
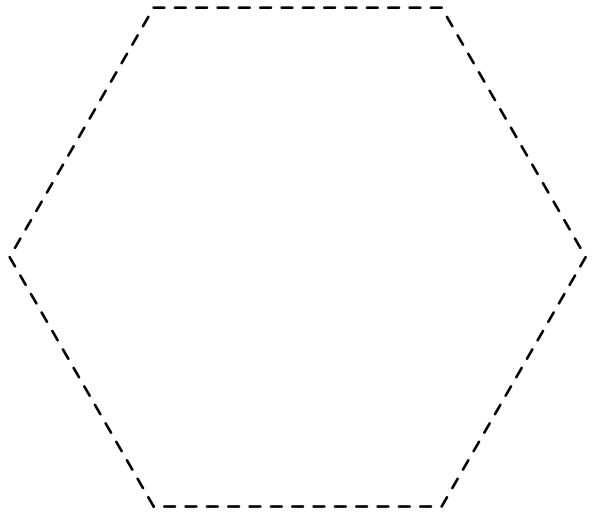
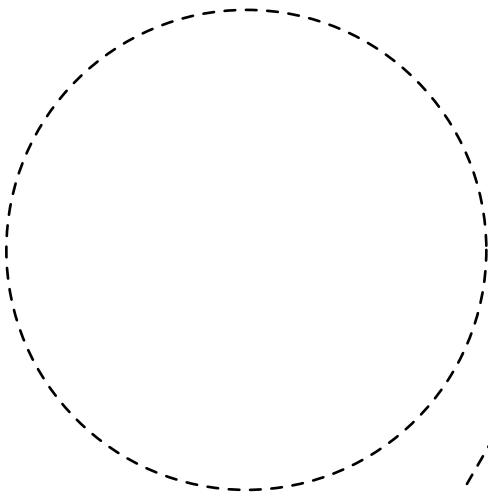
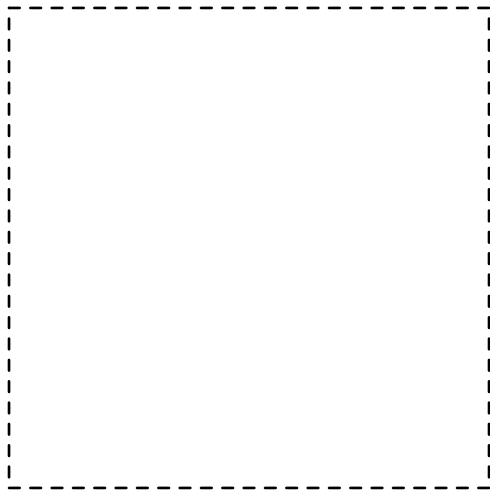
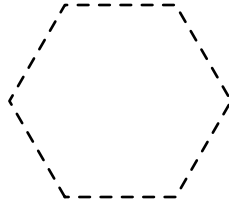
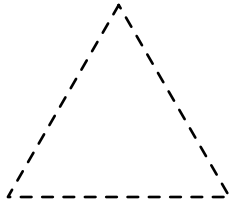
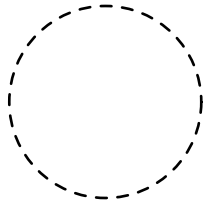
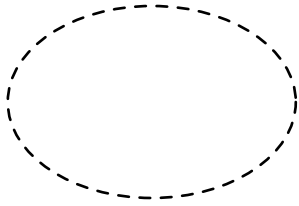
1. Give students a copy of the Shape Hunt recording sheets and a pencil.
2. Pair up students or divide the class into small groups. Tell students that they are going on a "shape hunt" in search of real-world objects in the classroom that look like each of the shapes on the recording sheet. Model the activity by finding one of the shapes on the recording sheet together. You can also use a document camera or whiteboard to display the shapes on the recording sheet as the class hunts for them. Model the position in which the shape was found. (For example, say, "The ball (sphere) is next to the jump rope.")
3. To organize the hunt, call out one shape at a time and give groups or pairs of students two to three minutes to search for objects that match that shape. Then have students return to their seats to discuss their findings. Encourage students to try to find at least three objects for each shape. (To save time, you may need to search for the first five shapes in one lesson and the remaining five shapes in a subsequent lesson.)
4. As they hunt, remind students to record their findings by drawing a picture of each object in the space beneath the corresponding shape. As a class discussion, have students explain and describe the position of each shape they find. (For example, they can say, "I found a round globe (sphere) next to the books. I see a square window in front of the tree.")

Independent Practice

1. Give each student a sheet of white construction paper and a variety of paper shapes (from the shapes template) in different colors. Encourage students to cut out the shapes (if you have not precut them).
2. Have students arrange and glue the shapes onto the white construction paper to make pictures of objects. (For example, students can glue a triangle on top of a square to make a house, a triangle at the end of a rectangle to make a rocket—or two stacked rectangles for a tall skyscraper!)
3. Encourage students to share what they created and describe their pictures by pointing out how the shapes were used and where they are positioned in relation to one another. (For example: "I made a car. The body of the car is a rectangle. Beneath the rectangle are two round circles for wheels, next to each other. Then I added a square on top of the rectangle for the top of the car.")

Extension

1. Print out a copy of the shape sorting mat and shape & picture cards to place in a learning center.
2. Cut apart the shape & picture cards. Place the shape cards in one zip-close bag and the picture cards in a separate zip-close bag. (You may also want to laminate the shape sorting mat for repeated use.)
3. Have students who visit the learning center practice sorting the pictures by shape. Instruct students to pull out a shape card and place it on the left side of the shape sorting mat. Then have them pull out the picture cards and place the corresponding pictures on the right side of the sorting mat.
4. Encourage students to sort all five shapes that are included.



Shape Hunt

Circle

Triangle

Square

Rectangle

Hexagon

Oval

Cube

Cone

Sphere

Cylinder

Shape Sorting

