

KEY CONCEPT OVERVIEW

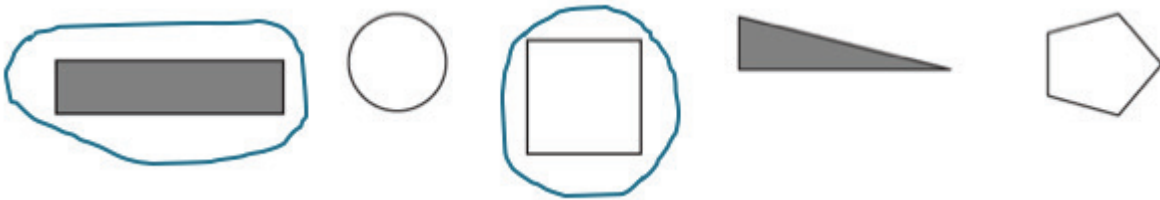
During the next few days, our math class will explore the **attributes**, or characteristics, of shapes. We will learn the names and attributes of the following **two-dimensional shapes**: circle, **triangle**, **rectangle**, **square**, **hexagon**, **trapezoid**, and **rhombus**. We will learn to describe two-dimensional shapes based on attributes of sides and corners. We will also learn the names and attributes of the following **three-dimensional shapes**: sphere, cube, cylinder, cone, and rectangular prism.

You can expect to see homework that asks your child to do the following:

- Identify and draw a shape according to the attributes of its sides and corners.
- Name shapes and list their attributes, or name a common attribute that describes shapes in a group.
- In a group of shapes, identify the shape that does not share the same attributes as the other shapes and explain why.
- Find and list three-dimensional shapes in the home.

SAMPLE PROBLEM (From Lesson 1)

Circle the shapes that have only **square corners**.



Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

- **Play Spot the Shape:** With your child, see who can spot the most two-dimensional and three-dimensional shapes. You can play this game at home or during a trip around town. Challenge your child to describe the attributes that define the shape as she names it. For example, if your child sees a cube, she might say, “I see a cube! It has 6 square **faces** and 8 corners!”
- **Play Guess My Shape:** Ask your child to guess a shape you are imagining by asking yes or no questions. For example, he might ask, “Does it have square corners?” or “Does it have any faces?” or “Does it have four sides?”
- **Play Draw that Shape:** Name a two-dimensional shape (circle, triangle, square, rectangle, hexagon, rhombus, or trapezoid) for your child to draw. Then ask her to list the attributes of the shape she drew.

TERMS

Attributes: Characteristics of an object such as its color or the number of its sides.

Face: A two-dimensional surface of a three-dimensional solid.

Hexagon: Flat, closed figure with six straight sides.

Rectangle: Flat, closed figure with four straight sides that form right angles (square corners) where they meet.

Rhombus: Flat, closed figure with two pairs of straight, parallel, opposite sides. All four sides are the same length.

Square: A rectangle with four sides of the same length; this attribute makes a square a special rhombus as well as a special rectangle.

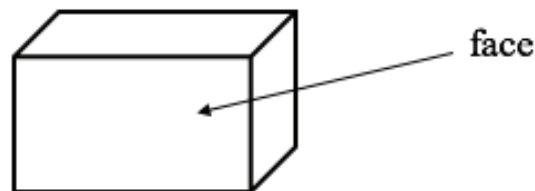
Square corners: Sides that form 90 degree, or right, angles. In Grade 1, students use a square, or the square corner of another object, to determine whether a shape has this type of angle.

Three-dimensional shape: An object that has depth, height, and width such as a cube, rectangular prism, cylinder, sphere, or cone.

Trapezoid: Flat, closed figure with four straight sides and at least one pair of opposite sides that are parallel.

Triangle: Flat, closed figure with three straight sides.

Two-dimensional shape: A flat shape with no depth. Examples include a circle, triangle, rectangle, square, hexagon, or trapezoid.



NOTE: Parallel is a term used in Grade 2 to describe opposite sides of a parallelogram. For example, “These sides are parallel because if they kept on going, they’d never intersect!”