

TIPS FOR FAMILIES

KEY CONCEPT OVERVIEW

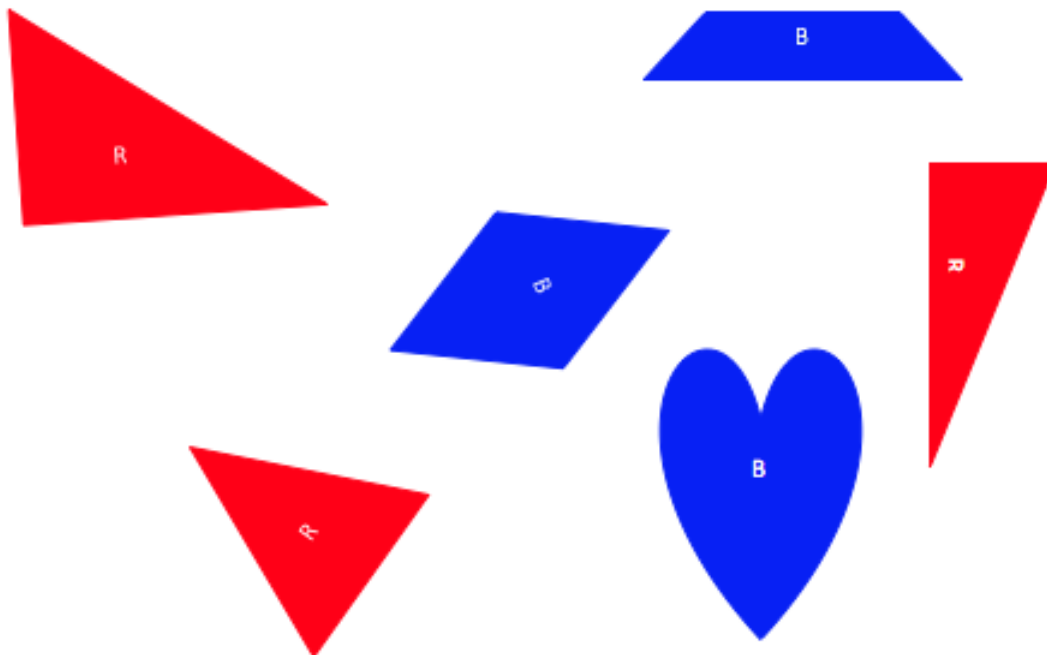
During the next week, our math class will explore triangles, squares, rectangles, hexagons, and circles. We will learn to recognize and name shapes based on the number of sides and corners instead of naming a shape based strictly on what it looks like. Students will sort **flat shapes** according to these characteristics. For example, students may say, “This shape is long and skinny and doesn’t look like a hexagon, but it has six sides and six corners so I will put it in the hexagon group!”

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

- Identify triangles, rectangles, hexagons, and circles in a group of shapes.
- Reason about which characteristics (sides and corners) determine how to classify a shape.
- Draw various shapes.

SAMPLE PROBLEM *(From Lesson 2)*

Color the triangles red and the other shapes blue.



HOW YOU CAN HELP AT HOME

- Identify shapes, first by their sides and corners and then by their names.
- Play Beep Number. Say three to four numbers in order, but replace one number with the word “beep.” For example, if you say, “5, 6, 7, beep,” then your child responds, “8.”
- Use uncooked spaghetti, string, pipe cleaners, or sticks to make various shapes. Ask your child, “How many corners (or sides) does this shape have?” Because shapes come in many sizes and orientations, create some examples that are atypical to broaden your child’s understanding of different shapes. (See images.)

**TERMS**

Flat shapes: Closed figures (e.g., squares, rectangles, circles, triangles, and hexagons) that have width and height but no depth; also known as two-dimensional shapes.



TIPS FOR FAMILIES**KEY CONCEPT OVERVIEW**

During the next few days, our math class will explore **solid shapes**, including cubes, cones, cylinders, and spheres. We will find that solid shapes are different from flat shapes because solid shapes are raised or can be held upright in students' hands. As they investigate further, students will notice that familiar flat shapes form the **faces** of solid shapes: "From above, this cube looks like a square! I can count 6 square faces on the cube!"

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

- Identify solid shapes in everyday objects; for example, dice are cubes, and a can is a cylinder.
- Sort solid shapes by characteristics (e.g., corners, faces, and edges).
- Arrange shapes by using **position words**.

SAMPLE PROBLEM *(From Lesson 7)*

Circle the cylinders with red.

Circle the cubes with yellow.

Circle the cones with green.

Circle the spheres with blue.



HOW YOU CAN HELP AT HOME _____

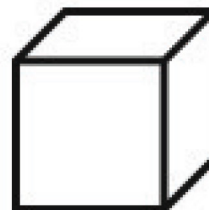
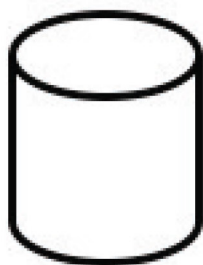
- Send your child on a scavenger hunt for solid shapes around the house. Ask your child to “prove” his choice by describing its characteristics. For example, “This ball is a sphere because it is round and can roll! It doesn’t have any faces or edges.”
- Invite your child to make solid shapes with modeling clay.
- Show your child four fingers or fewer. Ask, “How many more to make 5?”

TERMS _____

Face: The flat side of a solid shape; it can look like a circle, triangle, square, or other flat shape.

Position words: Words that describe location or placement, such as above, below, beside, in front of, next to, and behind.

Solid shapes: Objects (e.g., cylinders, spheres, cones, and cubes) that have width, height, and depth; also known as three-dimensional shapes. (See images below.)



TIPS FOR FAMILIES**KEY CONCEPT OVERVIEW**

During the next few days, our math class will focus on the differences between flat and solid shapes. We will sort shapes in several ways. Sometimes the teacher will specify a criterion, for example, “shapes with curves.” At other times, students will create their own sorting criteria, for example, “shapes that roll” and “shapes that don’t roll.” We will wrap up this module with a fun Shape Fair that gives students an opportunity to use a variety of skills—drawing, making, counting, sorting, and naming flat and solid shapes.

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

- Identify the shape that does not belong in a group.
- Search your kitchen for solid and flat shapes, and make a collage by drawing or tracing the shapes.

SAMPLE PROBLEM *(From Lesson 9)*

Circle the pictures of the flat shapes with red. Circle the pictures of the solid shapes with green.



HOW YOU CAN HELP AT HOME

- Cut drinking straws to various lengths, and use the pieces as sides to make flat shapes. Encourage your child to recreate various shapes. Ask, “Which shape cannot be made by connecting the ends of the straws?” (Circle.)
- Practice number fluency with your child. Quickly flash a few fingers, and then hide them behind your back. Ask your child to tell how many fingers she saw.
- Play I Spy with flat and solid shapes. For example, say, “I spy a red shape in the kitchen.” Invite your child to ask questions (e.g., “Is it solid?” “Is it a sphere?” “Is it under the table?”) until he correctly identifies the item you spied.