First Grade Geometry Parent Letter

Dear First Grade Family,

Focus of the Unit

Your first grader will focus on reasoning with shapes and their attributes throughout this unit. Using correct vocabulary will be important for your child to communicate their reasoning. We will use the word attribute to describe the characteristics of shapes such as closed, open, number of sides, and number of vertices, or ”corners.” Our goal is for students to recognize that some attributes such as size and color do not determine a shape, but attributes such as the number of sides or the length of sides are important when identifying shapes.

Which figure is a triangle? How do you know? **Student** I know that this shape is a triangle because it has 3 sides. It’s also closed, not open.	

In addition, students will explore how to compose (build) two-dimensional and three-dimensional shapes by combining two shapes (ex: two squares combine to create a rectangle).

Building Off Past Mathematics

Last year your child learned to name the following shapes: square, circle, triangle, rectangle, hexagon, sphere, cube, cone, and cylinder. Students were provided with opportunities to explore and discuss shapes in order to locate and identify shapes in the world around them. They also identified shapes as two-dimensional (“flat”) or three-dimensional (“solid”) and noted similarities and differences between shapes.

Strategies that Students Will Learn

Students will sort and draw examples and nonexamples of shapes to show their understanding of attributes.

Using pattern blocks allows students to explore relationships between regular shapes. Your first grader will have numerous opportunities to compose and decompose shapes through lessons, tasks, and games. Shape puzzles in which students use objects (e.g., pattern blocks) to fill a larger region help students experience the many ways shapes can be composed and decomposed. This builds an understanding of part-whole relationships.

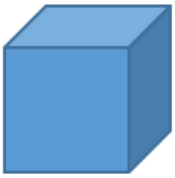
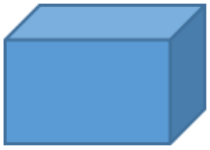
Ideas for Home Support

Build shapes with your child using toothpicks to explore how shapes are alike and different. How many different ways can you build a triangle? Can you build a triangle by using more than one triangle? How many triangles does it take to build a larger triangle. What if you change how your triangle looks? Can you make a rectangle out of triangles? A trapezoid? A hexagon?

Talk about the shapes your child sees in the world. Have students identify the shapes they find in the kitchen cupboards. What shape is the cereal box? What are the attributes of a rectangular prism? If we put two rectangular prisms together that are the same size will we still have a rectangular prism? How do you know? Does it matter which way I put the boxes together? Why? Does it matter if the rectangular prisms are the same size? Why? If I cut the rectangular prism in half what shapes will I get? What if I cut it a different way?

Thank you for serving as partners in your child's success as a mathematician!

<signature>

				
Square	Rectangle	Circle	Hexagon	Trapezoid
				
Sphere	Cylinder	Cube	Rectangular prism	Cone