

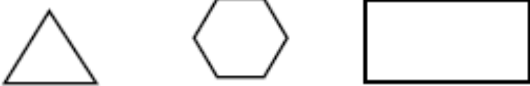




Mathematics Family Letter
Advanced Unit 7



Dear Family,

We are beginning a new unit in mathematics called Geometry. In this unit, students will identify two- and three-dimensional shapes. They will identify and explain properties of a polygon, examine angles in plane and 3-dimensional shapes, and classify angles by their size (acute, right, and obtuse). Students will cut and rearrange 2- and 3-dimensional shapes and describe the change in attributes. Finally, students will explore concepts related to line symmetry.

Throughout this unit, students will be working toward these and other goals:

BENCHMARKS/GOALS	EXAMPLES
Identify the number of sides of a polygon.	 3 sides 6 sides 4 sides
Identify rectangles as four-sided shapes with four right angles.	 These are all rectangles.
Identify the number of faces on a rectangular prism and show which faces are congruent.	 How many faces? Which faces are congruent?
Identify the three types of angles.	 acute right obtuse
Determine if figures are symmetrical and identify lines of symmetry.	 Does this figure have a line of symmetry? If so, draw it.

Students will continue to engage in math problems and activities and share how they solve a given problem. At home, you can encourage your child to explain his/her math thinking to you as you engage in activities that further support the mathematics in this unit.

The activities suggested below are related to the geometry we are currently working on in school. Doing them together can enrich your child's learning.

Look Out for Shapes Look for different shapes in the environment. Where do you see rectangles and squares? How many triangles do you see? Can you find a trapezoid? How about a hexagon or an octagon? Are there some shapes within other shapes, such as panes in a window? Your child can also look for and make three-dimensional shapes by combining blocks, boxes, or other building materials.

Making Shapes Make shape pictures out of shapes cut from paper. Scrap paper and newspaper work fine. Cut a variety of shapes (for example, squares, rectangles, triangles, circles, and hexagons) for your child to glue onto a background. You might like to do this as a family mural, adding shapes over a period of time. Also, you can practice creating symmetrical figures by folding paper in half and cutting shapes such as squares or circles. This activity will help children recognize lines of symmetry in a variety of figures.

Where Are Arrays? Look for rectangles or arrays (for example, floor tiles, eggs in a carton, cans in a box, calendar grids, and window panes). Talk about the number of rows and columns that you see and use that to figure out the total number of items in each array.

Math and Literature Here are some children's books that contain ideas related to our work in this Geometry Unit. You can find many of them in your local public library and read them together.

Burns, Marilyn. *The Greedy Triangle*

Friedman, Aileen. *A Cloak for the Dreamer*

Hoban, Tana. *Shapes, Shapes, Shapes*

Greene, Rhonda Gowler. *When a Line Bends . . . A Shape Begins*

Pluckrose, Henry. *Math Counts: Shape*

Schulz, Charles M. *How to Draw Peanuts*

Sincerely,

The Second Grade Team

