



FIRST GRADE MATHEMATICS – Unit 4

Dear Parents,

During Unit 4, students work with a variety of shapes in order to identify their attributes. For example, students will group squares, rectangles, rhombi, and other four-sided figures together and discuss what they have in common. Students will put together and take apart 2D and 3D shapes to create new composite figures (e.g., put two same sized squares together to make a rectangle or a square and a triangle together make a pentagon or house shape). Students will also divide shapes into halves and fourths to build an early understanding of fractions, but they will not need to record the fractions as $\frac{1}{2}$ or $\frac{1}{4}$.

GEOMETRY

Your children need to:

- Identify, name and compare plane geometric figures (triangles, circles, squares, rectangles and rhombi) by sorting and describing their attributes (by shape, number of sides, size or number of angles)
- Use concrete materials to build shapes (rectangles, squares, trapezoids, triangles, half-circles and quarter-circles) that have the defining attributes (attributes that make a shape that specific shape)
- Identify and explain the similarities and differences between two shapes.
- Use concrete materials to create composite shapes from two or three-dimensional shapes (cubes, right rectangular prisms, right circular cones and right circular cylinders).
- Use concrete materials to create a new shape from a composite shape.
- Identify equal parts of a partitioned shape with concrete materials and describe the shares using the words halves, fourths, and quarters as well as the phrases half of, fourth of and quarter of.
- Gather and collect data to answer questions
- Interpret data contained in picture graphs using a variety of categories with 1:1 intervals
- Collect, organize, display and interpret data using tally charts, picture graphs, bar graphs and tables

WAYS PARENTS CAN HELP

- Hunt for shapes around the house that are composite shapes and have your child identify the shapes that make up the composite shape.
- Sort a set of shapes and describe how the shapes are alike and different.
- Take a tissue box, cereal box or other rectangular prism apart and see what two dimensional shapes make up this shape.
- Draw a picture of your room or your house using only basic shapes (circles, squares, rectangles, and triangles). Name the shapes shown in the picture.
- Take food that is in a regular geometric shape (rectangle, square, triangle) and cut the food into equal shares. Describe the shares using words such as halves, fourths, quarters, half of, fourth of, and quarter of.
- Building with blocks or Legos and taking about which shapes (pieces) are used to create the figure.

KEY VOCABULARY

Attributes	More
Circle	Partitioning
Combine	Plane figure
Composite shapes	Pyramid
Corner	Quarter of
Cylinder	Rectangle
Data	Rectangular prism
Face	Rhombus
Fewer	Solid figure
Fourths	Sphere
Geometry	Square
Half of	Symmetry
Halves	Triangle