



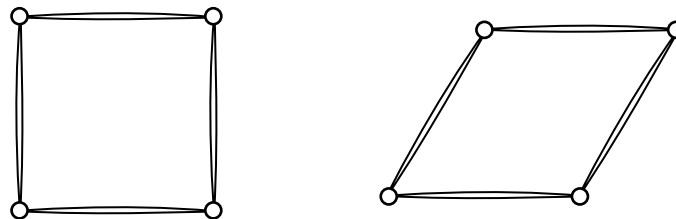
Related Activities to Try at Home (page 1 of 2)

Dear Family,

The activities below are related to the mathematics in the geometry and measurement unit *Size, Shape, and Symmetry*. You can use the activities to enrich your child's mathematical learning experience.

How Long Is It? Look for opportunities for you and your child to estimate and measure lengths and distances in real-life contexts, using both U.S. standard and metric units. You might have your own *benchmarks* to help you estimate. What do you imagine when you think of a centimeter? A yard? A mile? For instance, you might know that your index fingernail is about a centimeter wide, or that it is a mile to the post office. Show your child how you use various measurement tools in your own measurement activities—hobbies like sewing and carpentry are a natural for this. You and your child can go outside to measure larger distances. How many yards is it to the end of the block? What's the distance in feet between two trees? What would that same distance be in meters?

Building Polygons You and your child can use household materials to create 2-dimensional figures. You can use toothpicks or straws for the sides of your polygons, and small marshmallows, clay, or jelly beans as fasteners for the vertices. How many different kinds of quadrilaterals can you build? How many different kinds of triangles? What different sized angles can you make?



(continued)



Related Activities to Try at Home (page 2 of 2)

Symmetry Projects There are many opportunities to notice, name, and discuss symmetry. The world is full of symmetrical objects, both natural and artificial. Look for objects that are symmetrical around the kitchen or outside while on a walk or a drive. You may want to continue exploring symmetrical designs with different art projects.

- Your child can print shapes with cut potatoes or sponges dipped in paint on one side of a sheet of paper and then fold the paper in half. The design that results will be symmetrical around the fold.
- Paper-cutting is another way to create a symmetrical arrangement of shapes. Plain paper, tissue paper, or newspaper can be folded in quarters (or folded as many times as you like) and then cut and unfolded to create designs with more than one line of symmetry.

Math and Literature Here are some suggestions of children's books that contain relevant mathematical ideas about geometry and measurement. Look for these books at your local library.

Adler, David. *Shape Up!: Fun with Triangles and Other Polygons.*

Burns, Marilyn. *Spaghetti and Meatballs for All! A Mathematical Story.*

Burns, Marilyn. *The Greedy Triangle.*

Friedman, Aileen. *A Cloak for the Dreamer.*

Tompert, Ann. *Grandfather Tang's Story: A Tale Told with Tangrams.*

