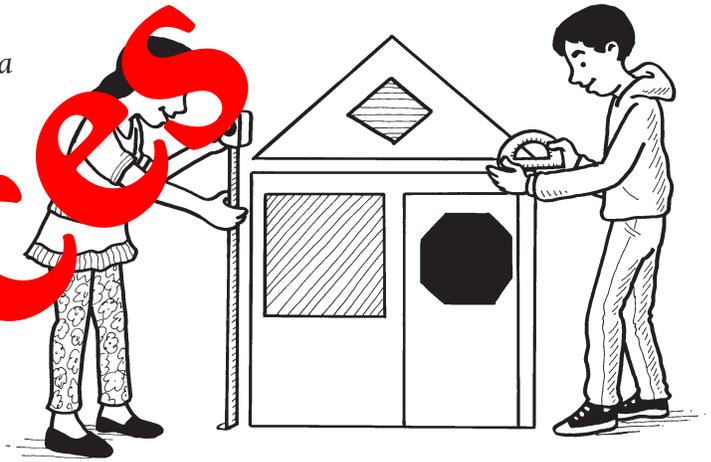# Geometry Around the House

Geometry is everywhere! Just ask your youngster to take a look around any part of your home. She's sure to spot cubes, obtuse angles, perpendicular lines, and more. The following activities will help her explore the geometry in everyday life.

House tour

Let your child pretend she's a real estate agent or a TV host. She'll practice measuring perimeter and area—then take your family on a "math tour" of your home. Ahead of time, she'll need to measure each room so she can announce how big it is.

First, help your youngster use a tape measure or a yardstick to measure each wall. She should write the measurements on a sheet of paper and add them together—that's the room's perimeter. So a room with 2 8-ft. walls and 2 10-ft. walls has

a perimeter of 36 feet (8 + 8 + 10 + 10 = 36). Then, she can multiply the room's length (8 feet) by its width (10 feet) to find the area (8 x 10 = 80 square feet).

Now go outside, ring the doorbell, and have your child invite you into the home. Her job is to lead you through each room, describing it and telling you its size. "This bedroom is 64 square feet with a window overlooking trees—just right for your little girl!"

Shape museum

Encourage your youngster to gather objects of different shapes from around the house. He'll use geometry vocabulary like *vertices* and *cone* as he displays the items in his very own "shape museum."

Together, list all the flat (2-D) and solid (3-D) shapes you can think of, such as circle, octagon, pyramid, and cone. Your child's goal is to find objects representing each shape in the house. He might locate a tennis ball (sphere), a Rubik's Cube (cube), an envelope (rectangle), and a soup can (cylinder). If he wants to include an object he can't pick up (say, a light fixture that's a hexagon), he could snap a photo.

To create his museum, he can arrange the shapes on a table and make an index card "plaque" for each one. Each plaque should identify the shape and tell how many corners (vertices) and sides a 2-D object has or how many vertices, edges, and faces a 3-D object has. A plaque for a soup can would say, "This is a cylinder. 2 faces, 2 edges, and 0 vertices."