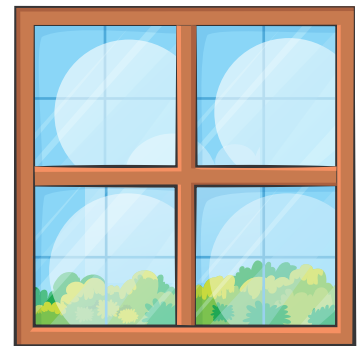# Related Activities at Home

Dear Family,

The activities suggested below are related to the mathematics in the geometry and fractions unit we are currently working on, *Attributes of Shapes and Parts of a Whole*. Doing the activities at home together will enrich your child's mathematical learning.

Shapes in the Environment Look for different shapes around your home and neighborhood. What shape are the doors and windows? Can you see shapes within other shapes, such as panes in a window? What shape are the street signs as you walk or drive to school? What shapes can you find around the kitchen?

Making Shapes Make pictures out of shapes cut from paper. Scrap paper and newspaper work fine. Cut a variety of shapes (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 time.

Flags and Fractions Many nations' flags and nautical flags are divided into fractional parts, such as halves, thirds, or fourths. You and your child might like to hunt for flags in books and around your neighborhood. You can find pictures of flags in an encyclopedia, in an atlas, in books about flags (see page 2), or on a website pertaining to flags. Find flags that are clearly divided into fractional parts, and then ask questions such as these: "How much of this flag is blue?", "What color is half of that flag?", and "Is that flag partitioned into halves or thirds?" Your child might draw the flags on graph paper, color them, and label fractional parts.
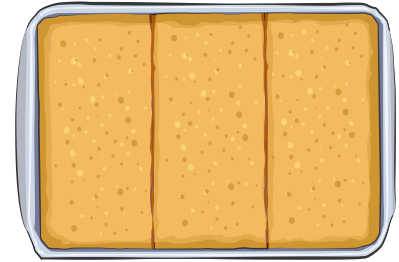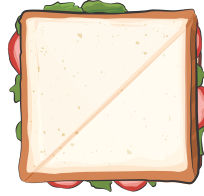
Related Activities at Home

Finding Fair Shares Your child can practice partitioning objects into equal shares. Ask your child, "Let's cut your sandwich into halves. How many different ways can we cut your sandwich so it becomes two equal pieces?" and "Can we cut this pan of cornbread into thirds? … What about fourths?"

Math and Literature
Below are some suggestions of children's books that contain relevant ideas about geometry and fractions. Most of them can be found in your school or local library.

Adler, David A. *Shape Up!*

Bednar, Sylvia. *Flags of the World.*

Burns, Marilyn. *The Greedy Triangle.*

Dodds, Dayle Ann. *Full House: An Invitation to Fractions.*

Franco, Betsy. *Bees, Snails, & Peacock Tails.*

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

Murphy, Stuart J. *Captain Invincible and the Space Shapes.*

Napoli, Donna Jo. *The Wishing Club: A Story About Fractions.*