



Chapter 14

Comparing and Contrasting Three-Dimensional Figures

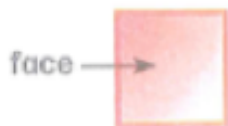
In this chapter, children explore three-dimensional figures. Many three-dimensional figures are familiar to children, even if they do not yet have the precise mathematical language to describe them. For example, paperback books, cereal boxes, and CD cases are all examples of rectangular prisms. Children begin by working with three-dimensional objects and then connect the physical shapes with two-dimensional drawings. This gives children an opportunity to develop spatial visualizing and reasoning abilities. Children relate learned figures to real-life objects and compare their attributes.

About the Math

- Recognizing similarities and differences between three-dimensional figures and being able to group them based on their attributes is an important mathematical task for children.
- Prisms have two congruent, parallel bases. A pyramid has only one base, which can be any polygon, and all the remaining faces are triangles that meet at a single point.

Vocabulary

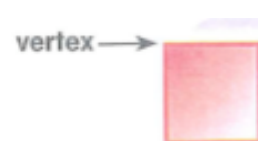
face



edge



vertex, vertices



Literature Connection

A 3-D Birthday Party

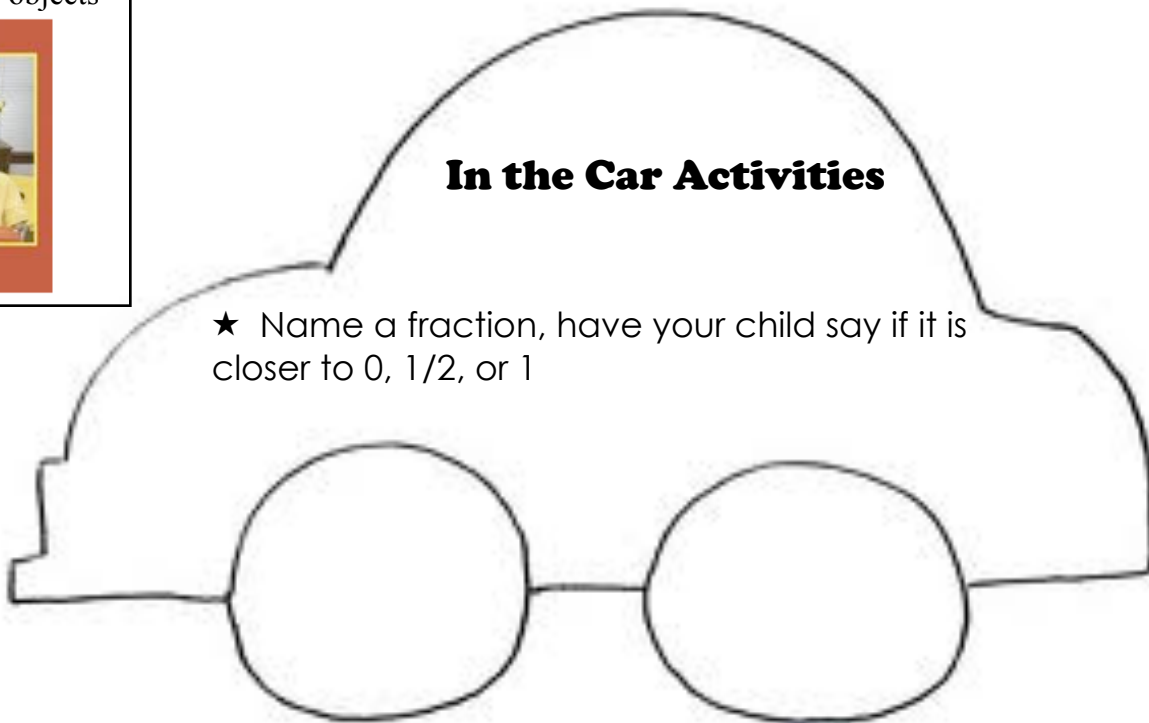
By Ellen B. Senisi

Math Concept: identifying three-dimensional objects



In the Car Activities

★ Name a fraction, have your child say if it is closer to 0, $1/2$, or 1



Family Fun

What's my Figure?

Work with your child to play this game. Your child will play this game in Lesson 1.

- Think of an object in the house that is shaped like one of the following figures. For example, a tissue box is shaped like a rectangular prism.



- Have your child ask *yes/no* questions to try and guess your secret object. Some possible questions might be: Is there a triangle in the figure? Does it roll?

- Have your child continue asking questions until he or she has correctly identified the object.



- Switch rolls and play again.

Making Faces

Together, trace a figure to see the faces.

- You will need a three-dimensional object and a pencil and paper.
- Help your child trace around one of the sides of the object.



- Ask your child to name the figure you traced.
- Try other objects. Talk about what sides you can trace and what shapes you will make.