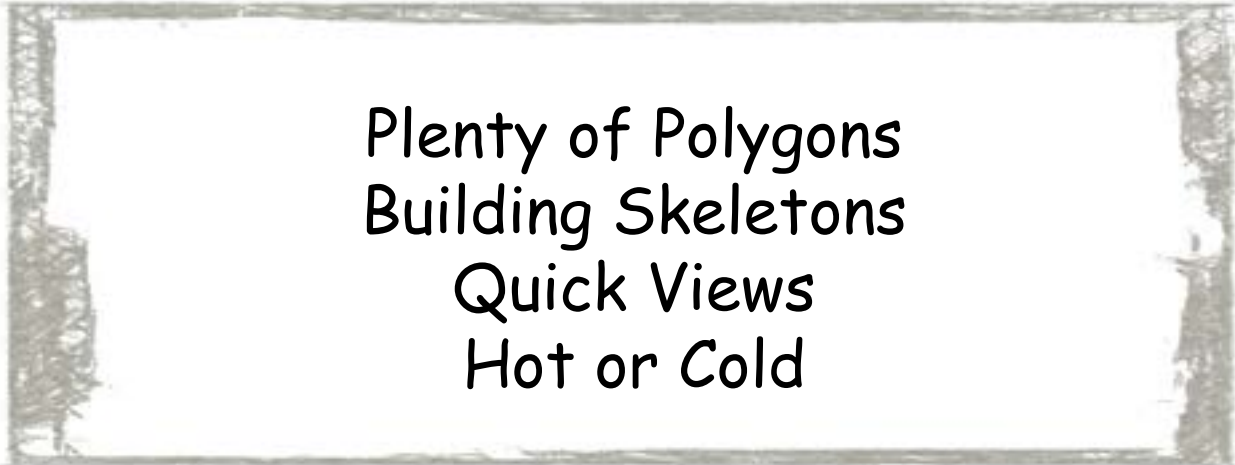


Home Connections

Math Activities

Grade 2

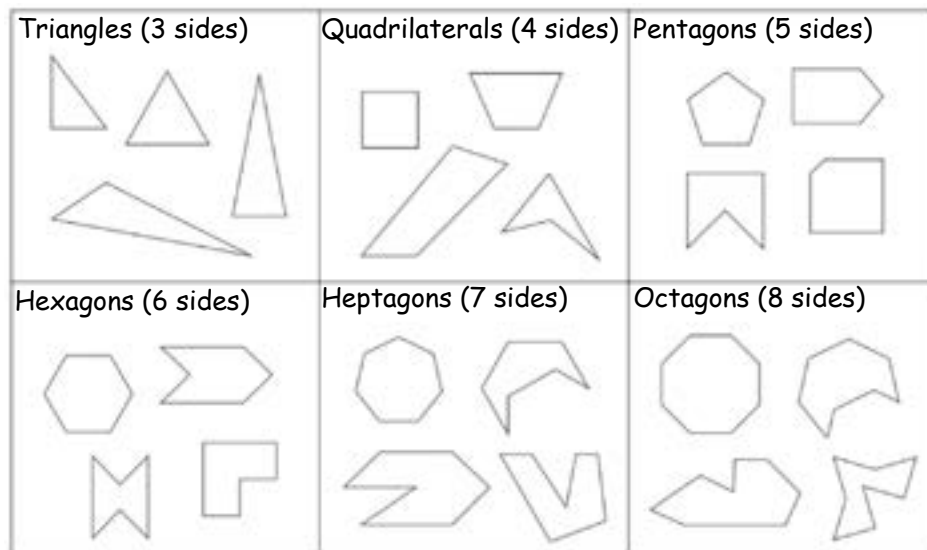
Geometry and Spatial Sense



Plenty of Polygons
Building Skeletons
Quick Views
Hot or Cold

Plenty of Polygons

1. Ask your child to explain what he or she knows about each kind of polygon. Encourage your child to talk about the number of sides each polygon has.
2. Have your child use a pencil and ruler to draw shapes with three to eight sides.
3. Ask your child to name the type of polygon it is.



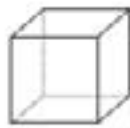
Polygons are closed shapes with only straight sides. Polygons have different names depending on the number of sides they have.

Let's Talk About It

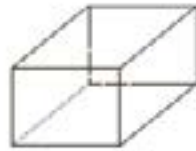
- How are the polygons different?
- How are polygons similar?
- How can you tell what kind of polygon it is?

Building Skeletons

1. Look around your home for materials to build skeletons.
2. Help your child with building skeletons of three-dimensional figures.



Cube



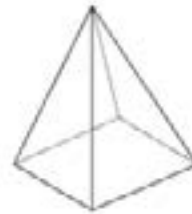
Rectangular Prism



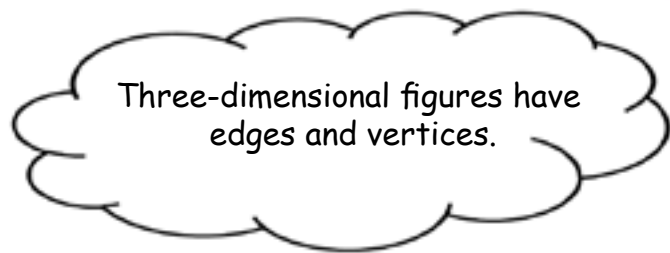
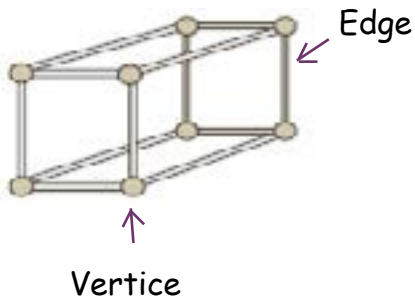
Triangular Prism



Triangle-based Pyramid



Square-based Pyramid



Let's Talk About It

- Can you find an object around our home that looks like the three-dimensional skeleton we made?
- How many edges does your three-dimensional figure have?
- How many vertices (corners) does your three-dimensional figure have?

Quick Views

Rules:

1. Cut out the two sets of shapes from the attached page. Keep one set of shapes and give the other set to your child.
2. Ask your child to close his or her eyes. While your child is not looking, take two of your shapes and place them together in any way. Here is an example of how you might arrange two shapes.



3. Now ask your child to open his or her eyes and look at the arrangement. After a few seconds, cover the arrangement with a sheet of paper.
4. Have your child use his or her set of shapes to re-create your shape arrangement from memory. When your child has finished, show your arrangement once again, and compare the two arrangements.
5. When your child is able to re-create arrangements made from two shapes, challenge him or her to re-create arrangements made from three or four shapes.

Opportunities to put together and take apart two-dimensional shapes and three-dimensional objects help to understand geometric relationships

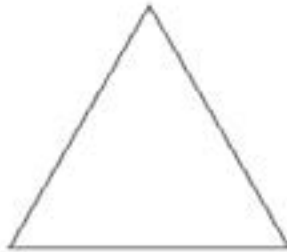
Let's Talk About It

- Which arrangements of the shapes did you find the easiest to re-create? Why?
- Which arrangements of the shapes did you find the hardest to re-create? Why?

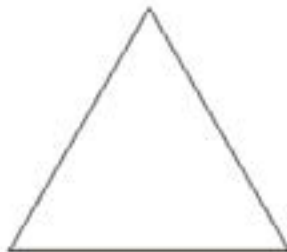
Quick Views



Shape Set 1



Shape Set 2



Hot or Cold?

1. Somewhere in the room, hide an object for your child to find.
2. Have your child move up to five steps at a time and describe the movements to you (For example, your child may say "I am taking 3 steps forward")
3. After your child has taken steps, tell him or her if he or she is hot, warm, cold, or on fire.

Hot = Your child is near the object

Warm/Warmer = Your child is moving closer to the object

Cold = Your child is far away from the object

Cool/Cooler = Your child is moving farther away from the object

On Fire = Your child has found the object.



4. Continue until your child is 'On Fire' and finds the object you hid.

Opportunities to identify and describe movement using directional language, develops spatial sense and vocabulary.

Let's Talk About It

- Reflect on your movements. Was there a faster way to find the object from your starting position. If so, what could it have been?