Unit 7 Family Support Materials

Geometry and Time

In this unit, students reason with shapes and their attributes and split shapes into equal pieces. Students also tell time to the hour and the half hour.

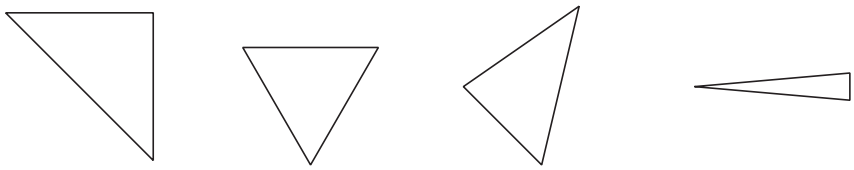
Section A: Flat and Solid Shapes

In this section, students explore and reason about the attributes of two-dimensional and three-dimensional shapes. Students name shapes, including *cone*, *sphere*, *cylinder*, *cube*, *square*, *rectangle*, *triangle*, *rhombus*, and *hexagon*. Students identify defining attributes (number of straight sides and number of corners) of triangles, rectangles, and squares, and distinguish them from non-defining attributes (color, orientation, size).

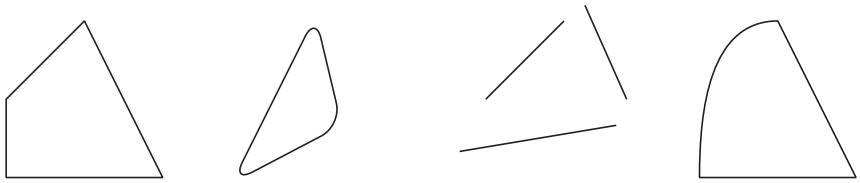
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They describe why a shape belongs in a certain category, using their own language. For example, “These are triangles because they have 3 straight sides and 3 pointy corners. This is not a triangle because the sides don’t touch.”

triangles



not triangles

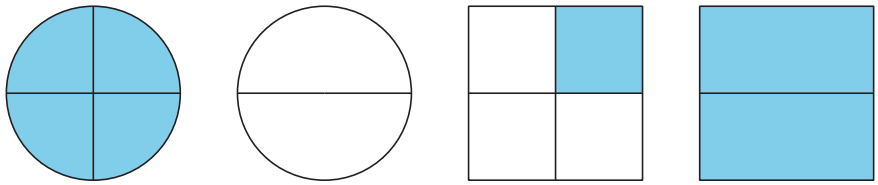


Students learn that a square is a special rectangle, because it has the defining attributes of a rectangle (4 sides, 4 square corners) and also has the defining attribute of a square (4 equal sides).

Section B: Halves and Quarters

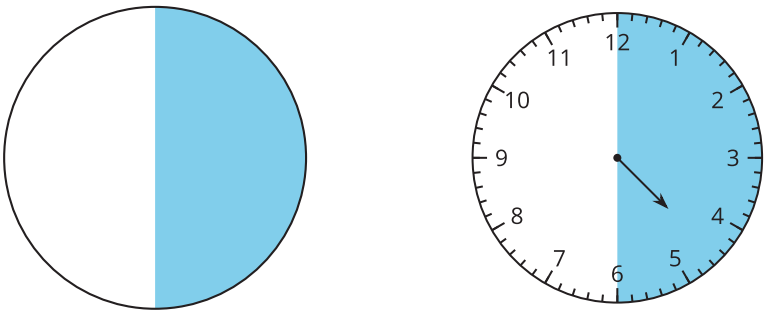
In this section, students explore the idea of halves and fourths (or quarters) as equal pieces of a whole. Students hear and use the term “halves” to describe a shape split into two equal pieces and the terms “fourths” and “quarters” to describe a shape split into four equal pieces.

They consider the size of a fourth and a half in relation to the same whole. They use the language *whole*, *halves*, *quarters*, *fourths*, *half of*, *a fourth of*, and *a quarter of* to describe the pieces and relationship of the pieces to the whole.



Section C: Tell Time in Hours and Half Hours

In this section, students learn to tell time to the hour and the half hour, on analog and digital clocks, by relating the numbers 1–12 to a clock face and a written time.



They identify the minute hand and the hour hand. Students learn that the hour hand points to a number, or between two numbers, and tells the hour. They also learn that when the minute hand points directly to the 12, it is "___ o'clock" or "___:00," and when the minute hand points to the 6, it is "half past ___" or "___:30."

Try it at home!

Play “I Spy” with your first grader to help them identify shapes in the real world.

Say:

- I spy a solid shape that rolls. What could be my shape?
- I spy a cylinder/cube/cone/sphere. What object is a cylinder/cone/cube/sphere?

Connect your first grader’s schedule to time to the hour and the half hour, on analog and digital clocks.

Ask:

- What time do you wake up in the morning? What time do you leave for school? What time do you get home from school?
- What time does the clock say now?
- What does the clock read when it is time for bed?
- What does the clock look like when it is 3:00?

Solution:
Answers may vary.

Sample response:

- I wake up at 7:00. I leave for school at 7:30. I get home

at 2:30.

- The clock says, “five o’clock.”
- It reads, “8:30,” when it’s time for bed.
- The hour hand points to 3. The minute hand points to 12.