Unit 1 Lesson 2: Corresponding Parts and Scale Factors
Activity 2: Scaled Triangles

Choose one of the triangles that is not a scaled copy of Triangle O. Describe how you could change at least one side to make a scaled copy, while leaving at least one side unchanged.

Unit 1 Lesson 3: Making Scaled Copies
Activity 2: Which Operations? (Part 1)

The side lengths of Triangle B are all 5 more than the side lengths of Triangle A. Can Triangle B be a scaled copy of Triangle A? Explain your reasoning.

Unit 1 Lesson 4: Scaled Relationships
Activity 2: Scaled or Not Scaled?

All side lengths of Quadrilateral Y are 2, and all side lengths of Quadrilateral Z are 3. Does Quadrilateral Y have to be a scaled copy of Quadrilateral Z? Explain your reasoning.

Unit 1 Lesson 5: The Size of the Scale Factor
Activity 1: Card: Scaled Copies

Triangle B is a scaled copy of Triangle A with scale factor $\frac{1}{2}$.

1. How many times bigger are the side lengths of Triangle B when compared with Triangle A?

2. Imagine you scale Triangle B by a scale factor of $\frac{1}{2}$ to get Triangle C. How many times bigger will the side lengths of Triangle C be when compared with Triangle A?

3. Triangle B has been scaled once. Triangle C has been scaled twice. Imagine you scale Triangle A *n* times to get Triangle N, always using a scale factor of $\frac{1}{2}$. How many times bigger will the side lengths of Triangle N be when compared to Triangle A?

Unit 1 Lesson 7: Scale Drawings
Activity 2: Tall Structures

The tallest mountain in the United States, Mount Denali in Alaska, is about 6,190 m tall. If this mountain were shown on the scale drawing, how would its height compare to the heights of the structures? Explain or show your reasoning.

Unit 1 Lesson Creating Scale Drawings
Activity 1: Bedroom Floor Plan

If Noah wanted to draw another floor plan on which Wall C was 20 cm, would 1 cm to 5 m be the right scale to use? Explain your reasoning.

Unit 1 Lesson 11: Scales without Units
Activity 1: Apollo Lunar Module

The table below shows the distance between the Sun and 8 planets in our solar system.

planet	average distance (millions of miles)
Mercury	35
Venus	67
Earth	93
Mars	142
Jupiter	484
Saturn	887
Uranus	1,784
Neptune	2,795

1. If you wanted to create a scale model of the solar system that could fit somewhere in your school, what scale would you use? Explain your reasoning and include labels.

2. The diameter of Earth is approximately 8,000 mi. What would the diameter of Earth be in your scale model?

Unit 1 Lesson 12: Units in Scale Drawings
Activity 3: Pondering Pools

1. Square A is a scaled copy of Square B with scale factor 2. If the area of Square is 10 units, what is the area of Square B?

2. Cube A is a scaled copy of Cube B with a scale factor 2. If the volume of Cube A is 10 $unit^3$, what is the volume of Cube B?

3. The four-dimensional Hypercube A is a scaled copy of Hypercube B with scale factor 2. ff the "volume" of Hypercube A is 10 $unit^4$, what do you think the "volume" of Hypercube B is?