

Unit 2: Scale Drawings, Similarity, and Slope

Family Resources for Math 7B/8 Unit 2: Scale Drawings, Similarity, and Slope

Mathematical Modeling

Mathematical modeling is the process of using math tools to help describe the physical world. The purpose of using mathematical modeling in instruction is to help students see math as meaningful, useful, and connected to the real world. This might mean using a bar graph to show statistical data, approximating the shape of a coin as a cylinder, or using an equation to represent the path of an object.

With modeling, math becomes a tool for exploring situations, making decisions, and explaining thinking. Students make assumptions and approximations to simplify complicated situations, realizing they may need revision later. Students learn that it is okay to try different strategies, make mistakes, and adjust their thinking. They work with others, share ideas, and explain their reasoning, which deepens their understanding and strengthens their confidence. Over time, students begin to see themselves as capable problem solvers who can use math beyond the classroom and realize the role of mathematics in everyday life.



For additional information and resources to support at home, please visit the [Office of Mathematics website](#).

Big Ideas in Unit 2

Within this unit, students will learn these big ideas:

- Scaled Copies
- Scale Drawings
- Similarity
- Slope

For more details about this unit, see [Unit 2 Family Resources](#).

Lesson Specific Resources

Use the links below to learn about the learning from each lesson.

Lesson Link
<u>2.1 What Are Scaled Copies?</u>
<u>2.2 Scale Factors and Making Scaled Copies</u>
<u>2.3 Scaled Relationships</u>
<u>2.4 Scale Drawings</u>
<u>2.5 Creating Scale Drawings</u>
<u>2.6 Changing Scales in Scale Drawings</u>
<u>2.7 Units in Scale Drawings</u>
<u>2.8 Projecting and Scaling</u>
<u>2.12 Similarity</u>
<u>2.13 Similar Triangles</u>
<u>2.14 Side Length Quotients in Similar Triangles</u>
<u>2.15 Meet Slope</u>
<u>2.16 Writing Equations for Lines</u>
<u>2.17 Using Equations for Lines</u>
<u>2.18 Draw It to Scale</u>
<u>2.19 The Shadow Knows</u>