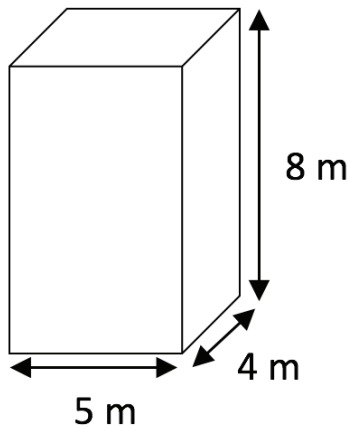# EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

In Lessons 4 through 9, students continue to work with volume as they learn to find the volume of a **rectangular prism**. Additionally, students apply their skills in real-world contexts.

You can expect to see homework that asks your child to do the following:

- Find the volume of a rectangular prism by using volume formulas:
  - Volume of a rectangular prism = length × width × height.
  - Volume of a rectangular prism = area of the base × height.
- Solve problems by using the equation 1 cm³ = 1 mL.
- Solve word problems involving volume.

SAMPLE PROBLEM *(From Lesson 4)*

Calculate the volume of the rectangular prism. Include the units in your number sentence.

Volume = 5 m × 4 m × 8 m = 160 m³

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

- Help your child practice finding the volumes of rectangular prisms. Find rectangular prisms in your home. Use a ruler to measure the length, width, and height of each prism to the nearest centimeter or inch, and then find the volume of the prism. For example, if a cereal box measures a length of 9 inches, a width of 3 inches, and a height of 13 inches, then the volume of this cereal box is 351 cubic inches.

- Play the Find the Volume card game with your child.

  1. Remove the jacks, queens, kings, aces, and jokers from a deck of cards.

  2. Put the stack of remaining cards facedown.

  3. Flip over three cards.

  4. The number on each card represents a dimension of a rectangular prism. Let the first card represent the length, the second the width, and the third the height.

  5. Choose a unit of measure for the dimensions of the rectangular prism, such as inches, feet, centimeters, or meters.

  6. Write the multiplication expression for the volume of the rectangular prism, and ask your child to find the volume.

For example, you flip cards with the numbers 9, 7, and 4, and you decide to use feet as the unit. The number 9 represents the length of 9 feet. The number 7 represents the width of 7 feet. The number 4 represents the height of 4 feet. You write 9 ft × 7 ft × 4 ft. Your child writes
9 ft × 7 ft × 4 ft = 252 cubic ft.
NOTE: For rectangular prisms, you can assign any of the three numbers to be the length, width, or height. The multiplication yields the same answer regardless of measurement assignment.

TERMS

Rectangular prism: A three-dimensional figure with six rectangular sides. See sample image below.