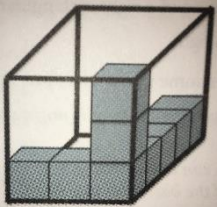
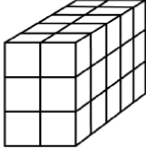

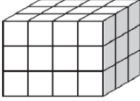


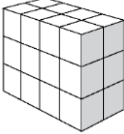
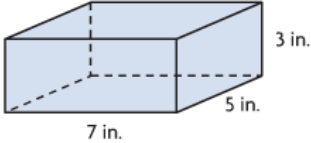


Understanding Volume Concepts

Overarching Student Learning Goals In this unit, your child will work to build an understanding of the following:	Resources/Tasks to support your child at home.
<p>Explain what it means to find the volume of a prism and how cubic units are used to measure volume.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">Volume is the number of cubic units needed to fill the space inside a 3-dimensional figure.</div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"><div style="text-align: center;"><p>A rectangular prism is shown.</p><p>What is the volume of the prism in cubic inches?</p></div></div>	<ul style="list-style-type: none">LearnZillion: Understanding Volume http://bit.ly/2zuGljCLearnZillion: Find Volume by Counting Cubes http://bit.ly/2SLjNUxWorking for Wonka - http://tinyurl.com/had8w32 <p>Find the volume of the rectangular prisms:</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"><div style="text-align: center;"> </div><div style="text-align: center;"> </div></div>
<p>Relate the measure of volume to using multiplication.</p> <ul style="list-style-type: none">Use a formula to find volume: <div style="display: flex; justify-content: space-around; align-items: center; margin: 10px 0;">$V = l \times w \times h$or$V = B \times h \quad (B = l \times w)$</div> <div style="text-align: center; margin: 10px 0;"></div> <div style="display: flex; justify-content: space-around; align-items: center;"><div style="text-align: center;">$V = 7 \text{ in} \times 5 \text{ in} \times 3 \text{ in}$ $= 105 \text{ in}^3$</div>or<div style="text-align: center;">$V = 35 \text{ in}^2 \times 3 \text{ in}$ $= 105 \text{ in}^3$</div></div>	<ul style="list-style-type: none">LearnZillion: Use Multiplication to Find the Volume of a Solid Figure http://bit.ly/2F1Y08hLearnZillion: Find Volume by Multiplying the Area of the Base by the Height http://bit.ly/2D41Ta7Look around the house for objects that are shaped like rectangular prisms. For example: cereal boxes, tissue boxes, shoeboxes, etc. Measure the length, width and height of each rectangular prism to the nearest inch, foot, or centimeter. Use the measurements to calculate the volume of each.How did you find the volume of each prism? What does B mean in the volume formula?

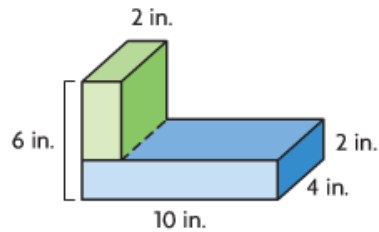
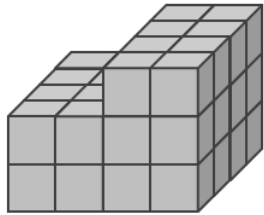
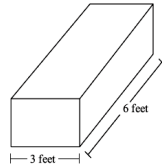
Solve problems using the understanding of volume, including finding the volume of complex figures.

The volume of the prism is 36 ft^3 .
What is the height?

$$36 = 3 \times 6 \times h$$

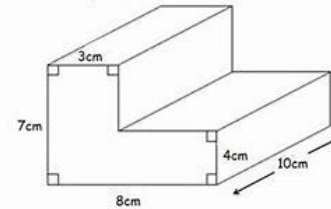
$$36 = 18 \times h$$

$$h = 2 \text{ feet}$$



- A toy box has a volume of 60 cubic feet. The box is 5 feet long and 4 feet wide. What is the height of the toy box?
- Khan Academy: [Find volume through decomposition](#)
- LearnZillion: Recognize Volume as Additive <http://bit.ly/2Pdyguk>
- Find the volume of rectangular prisms found at home: cereal box, tissue box, shoe box, etc. Find and compare the volume of rectangular prisms (boxes) found. Put two prisms together. Find the volume of the new shape.

Example



What is one way to decompose this complex figure into two rectangular prisms?

What is another way this figure could be decomposed?