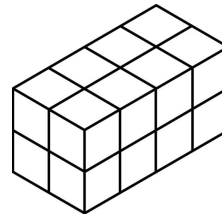
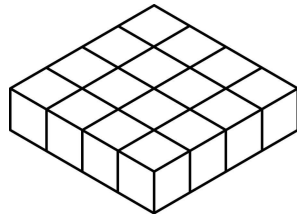


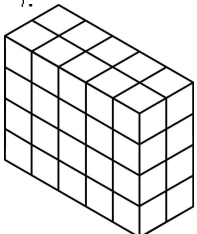
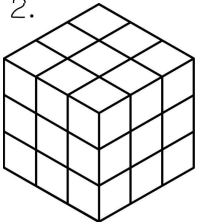
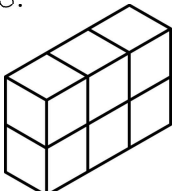
VOLUME OF RECTANGULAR PRISMS

VOLUME

- Volume is the amount of _____ a 3D object occupies.
- Just like area is measured in unit _____, volume is measured in unit _____.
- A figure is packed with unit cubes, even if not all of the cubes are _____; they are still part of the volume.

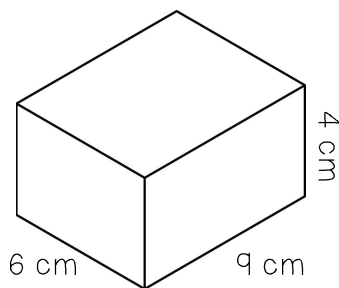


Label the length, width, and height of each figure. Describe how the dimensions and the total number of cubes are related.

<p>1.</p>  <p>Height: _____ Width: _____ Length: _____ Total Cubes: _____</p>	<p>2.</p>  <p>Height: _____ Width: _____ Length: _____ Total Cubes: _____</p>	<p>3.</p>  <p>Height: _____ Width: _____ Length: _____ Total Cubes: _____</p>
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RECTANGULAR PRISMS

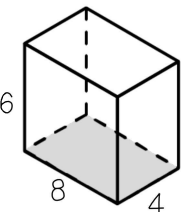
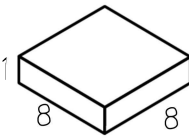

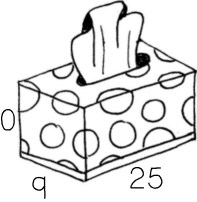
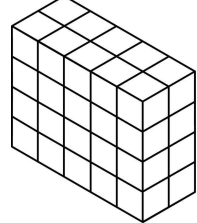
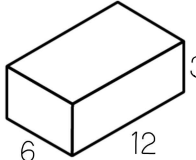
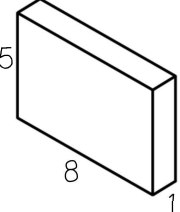
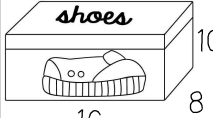
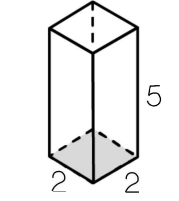
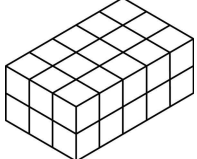
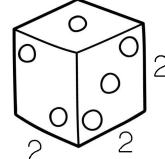
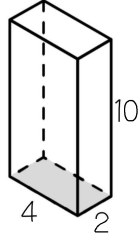
- $V = \text{_____}$ or $V = \text{_____}$
- Volume can be determined by finding the _____ of the base (B) and multiplying it by the _____ of the object.



RECTANGULAR PRISM	
FORMULA	
PLUG IN VALUES	
VOLUME	

AREA OF THE BASE:**VOLUME OF RECTANGULAR PRISMS:**

Practice finding the volume of rectangular prisms below. All measurements are in centimeters. Start with question # 1, then roll a pair of dice and find the sum of the two numbers showing. Solve that problem.

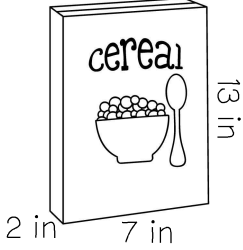
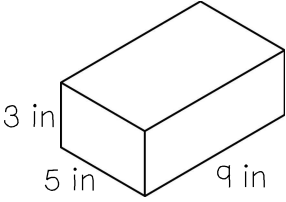
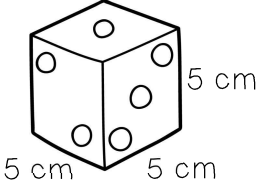
1 	2 	3 	4 	5 	6 
7 	8 	9 	10 	11 	12 

SHOW WORK HERE:

Summarize today's lesson:

VOLUME OF RECTANGULAR PRISMS

In questions 1-3, determine if the work is correct. Correct any errors and explain your thinking.

<p>1. </p> <p>$V = B h$ $V = 9 (13)$ $V = 117 \text{ in}^3$</p> <hr/> <hr/> <hr/> <hr/>	<p>2. </p> <p>$V = B h$ $V = 45 (3)$ $V = 145 \text{ in}^3$</p> <hr/> <hr/> <hr/> <hr/>	<p>3. </p> <p>$V = B h$ $V = 25 (5)$ $V = 125 \text{ cm}^3$</p> <hr/> <hr/> <hr/> <hr/>
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Draw a picture, set up an equation using a formula, and solve each of the problems below.

<p>4. A laundry detergent box measures 12 inches by 8 inches by 3 inches. What is the volume of two boxes of detergent?</p> <p>Formula: _____</p> <p>Plug in values: _____</p> <p>Solution: _____</p>	<p>5. A vase in the shape of a cube measures 8 inches on each side. The vase is filled halfway with water. How many cubic inches of water are in the vase?</p> <p>Formula: _____</p> <p>Plug in values: _____</p> <p>Solution: _____</p>
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6. Two different boxes of books are delivered to the library. The first box measures 18 inches by 8 inches by 15 inches. The second box is 10 inches tall, and the area of the base measures 196 inches squared. Which box has a greater volume and by how much?

