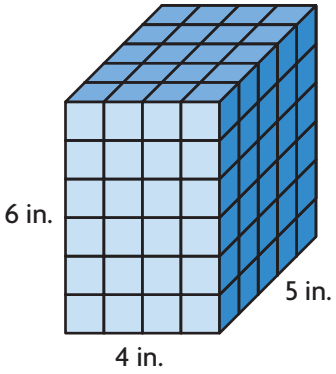
Name _____

Share and Show

Math Board

Find the volume.

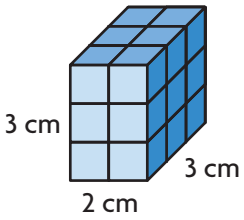


1. The length of the rectangular prism is _____.

The width is _____. So, the area of the base is _____.

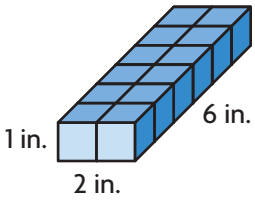
The height is _____. So, the volume of the prism is _____.

2.



Volume: _____

3.



Volume: _____

Math Talk

MTR 4.1 Engage in discussions on mathematical thinking.

Explain why area is expressed in square units and volume is expressed in cubic units.

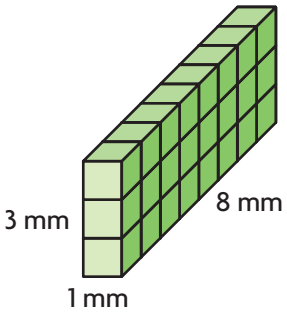
On Your Own

4. MTR Nou, Simon, and Aaliyah each make the rectangular prism shown. If they stand all of their prisms together, side by side, to make one large rectangular prism, what is the volume of the new prism? How did the dimensions change?

_____

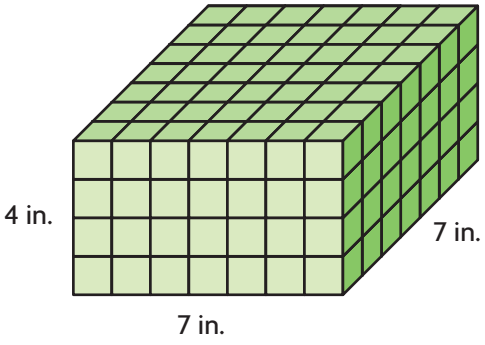
_____

_____



5. The rectangular prism is made of 1-inch cubes. If two more layers of cubes are placed on top of the rectangular prism, how many more cubes are added to the prism? What would be the volume of the new rectangular prism?

_____



Problem Solving · Applications

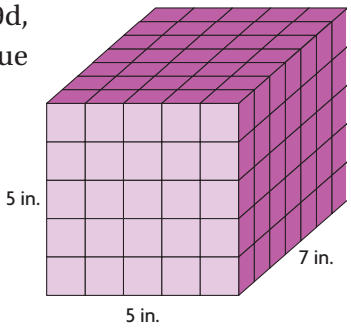
MATH on the Spot

6. Rich is building a travel crate for his dog, Thomas, a beagle-mix who is about 30 inches long, 12 inches wide, and 24 inches tall. For Thomas to travel safely, his crate needs to be a rectangular prism that is about 12 inches greater than his length and width, and 6 inches greater than his height. What is the volume of the travel crate that Rich should build?

7. What happens to the volume of a rectangular prism if you double the height? Give an example.

8. MTR Describe the difference between area and volume.

9. Yee-Tai used 1-inch cubes to make the rectangular prism shown. For 9a–9d, write the value from the tiles that makes each statement correct. Each value can be used more than once or not at all.



1	3	5	7	12	35	125	175

9a. Each cube has a volume of ☐ cubic inch(es).

9b. Each layer of the prism is made up of ☐ cubes.

9c. There are ☐ layers of cubes.

9d. The volume of the prism is ☐ cubic inches.