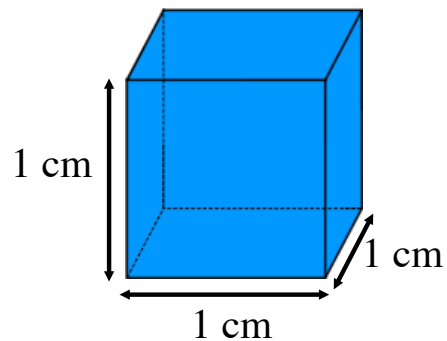


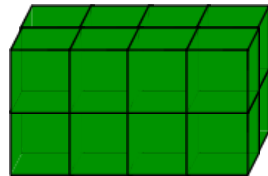
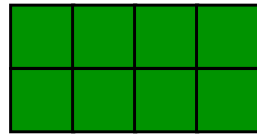
## 8th Grade Lesson 45

- I can find the volume of right geometric solids.



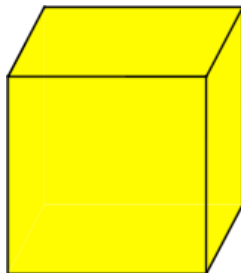
We use the word **volume** to describe a space or a solid that has depth as well as length and width. Volume describes how many cubes of a certain size something will hold. A **cube** is an object that has six identical square faces.





A geometric figure that occupies a space is a **geometric solid**.

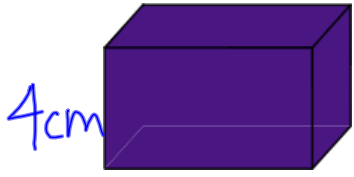
The bottom of a geometric solid is the **base**.



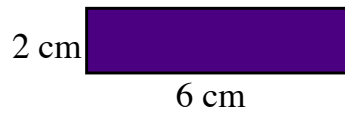
**Right geometric solids**, or just **right solids**, have sides that make right angles where they contact the base.



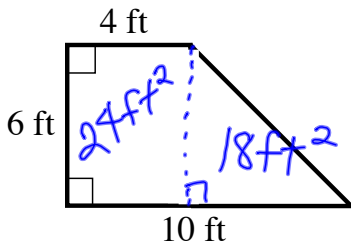
Volume of a right solid = area of base × height of the solid



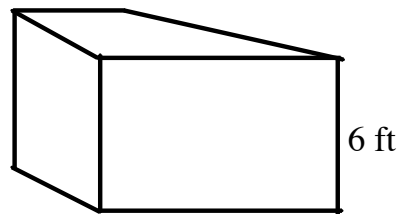
$$\begin{array}{r} 12 \text{ cm}^2 \\ \times 4 \text{ cm} \\ \hline 48 \text{ cm}^3 \end{array}$$



$$\begin{array}{r} 6 \text{ cm} \\ \times 2 \text{ cm} \\ \hline 12 \text{ cm}^2 \end{array}$$



$$\begin{array}{r} 42 \text{ ft}^2 \\ \times 6 \text{ ft} \\ \hline 252 \text{ ft}^3 \end{array}$$



2m  
10m  
8m  
16m<sup>2</sup>  
20m<sup>2</sup>  
2m  
10m

$$\begin{array}{r} 26\text{m}^2 \\ \times 12\text{m} \\ \hline 432\text{m}^3 \end{array}$$

**Assignment:**

Problem Set 45