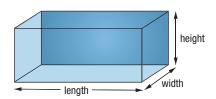
# **Measuring Volume**



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### **Regular Solid**

- 1. Measure the needed dimensions.
- 2. Plug the dimensions into the equation for volume for the appropriate shape.

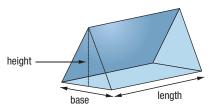


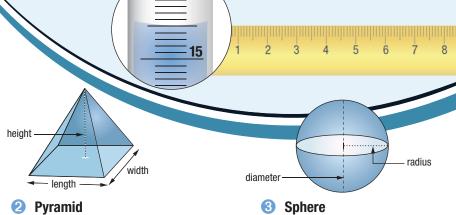
**Rectangular prism** 

Equation: length  $\times$  width  $\times$  height

4 Triangular prism

Equation:  $1/2 \times \text{triangle height} \times \text{triangle base} \times \text{length}$ 

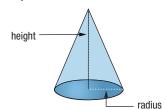




Equation:  $1/3 \times length \times width \times height$ 

Cone

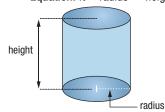
**Equation:**  $1/3 \times \pi \times radius^2 \times height$ 



Equation:  $4/3 \times \pi \times radius^3$ 

Cylinder

Equation:  $\pi \times radius^2 \times height$ 



#### **Irregular Solid**

- 1. Put a known volume of water in a graduated cylinder (initial volume).
- 2. Add the irregular solid to the graduated cylinder.
- 3. Determine the new volume contained in the graduated cylinder (final volume).
- 4. Subtract the initial volume from the final volume. This is the volume of the solid.

## Final Volume - Initial Volume = Volume of Irregular Solid irregular **CAROLINA CAROLINA** solid BOROSILICATE GLASS BOROSILICATE 25 final volume known/initial volume irregular solid

#### Liquid

- 1. Place a graduated cylinder on a level, flat surface.
- 2. Pour the liquid into the graduated cylinder.
- 3. Examine the liquid at eye level.
- 4. Read the numbered mark at the lowest point of the meniscus.

