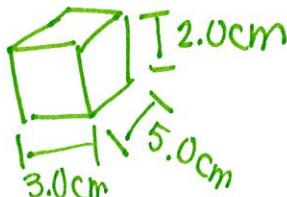


$$d = \frac{m}{V}$$

- 1) What is the density of an object with a mass of 55.0g and a volume of 9.2cm<sup>3</sup>? ✓

$$d = \frac{55.0\text{g}}{9.2\text{cm}^3} = [6.0\text{ g/cm}^3]$$

- 2) A cube, below, has the dimensions shown. Its mass is 98.9g. Find the density.



$$d = \frac{98.9\text{g}}{30.\text{cm}^3} = [3.3\text{ g/cm}^3]$$

$$V = l \times w \times h = 3.0\text{cm} \times 5.0\text{cm} \times 2.0\text{cm} = 30.\text{cm}^3$$

- 3) A liquid has a density of .926 g/mL and a volume of 18.3 mL. Find the mass.

$$d = \frac{m}{V}$$

$$18.3\text{mL} \cdot .926\frac{\text{g}}{\text{mL}} = \frac{m}{18.3\text{mL}} \cdot 18.3\text{mL}$$

$$16.9\text{g} = m$$

- 4) An unknown object has a mass of 112.0g and a density of 1.86 g/cm<sup>3</sup>. Find the volume.

$$V \cdot 1.86\frac{\text{g}}{\text{cm}^3} = \frac{112.0\text{g}}{\cancel{1}} \cdot \cancel{V}$$

$$\frac{1}{\cancel{1}} = 1 \cdot \frac{\text{cm}^3}{\cancel{1}}$$

$$\frac{V \cdot 1.86\frac{\text{g}}{\text{cm}^3}}{1.86\frac{\text{g}}{\text{cm}^3}} = \frac{112.0\text{g}}{1.86\frac{\text{g}}{\text{cm}^3}}$$

$$V = 60.2\text{ cm}^3$$

$$\cancel{\frac{\text{g} \cdot \text{cm}^3}{\text{g}}} =$$