

Density Worksheet

Density is the mass in a given volume

The units of density are grams per mL or grams per cm^3

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

1. What is the density if 25.6 g of a metal in a volume of 11.2 cm^3 ?
2. How many mL of propanol are needed if 36.2 g are required for an experiment? The density of propanol is 0.803 g/mL ?
3. A spherical piece of metal has a mass of 87.6 g. Its diameter is 4.32 in. What is the density of the metal in g/cm^3 ? $V_{\text{sphere}} = \frac{4}{3}\pi r^3$.
4. How many grams of lead, Pb, are required if the volume is 28.6 cm^3 ?
5. A substance has a mass of 18.6 kg and a volume of 100.25 L. Will this substance float or sink in water?