

# Density of a Metal

Density is defined as the mass per unit volume of an object. Density is calculated using the formula  $D=M/V$ , where D is density, M is mass and V is volume of the substance being measured. In this experiment you will calculate the density of several common substances measured in units of g/mL.

## Procedure:

1. Select a metal sample and write its name under the sample column.
2. Measure the metal's mass, and record it on your data table.
3. Using various methods (volumetric analysis, measurement, etc...), measure the volume of the metal sample and record on the data table. Make sure to show any measurements and/or calculations used to obtain this volume in a calculations section below your data table.
4. Calculate the density of each sample and record on your data table. (Show Calculations!)
5. Compare your experimental density for each metal to the accepted value provided. Calculate the percent error by using the following formula:

$$\text{Percent Error} = \frac{|\text{Experimental}-\text{Accepted}|}{\text{Accepted}} \times 100$$