Summary of Density Lab Calculations

Using "Best Line" (not data points), determine the Slope of Volume vs Mass Data Plot

Pick two (x,y) points on "best line"

$$\text{Slope} = \frac{y_2 - y_1}{x_2 - x_1}$$

There is a How to Graph Summary as a separate download for those who need it

Determine the Density of a Regular Solid (Marble)

1. Calculate the radius of the marble.

   Radius (r) = diameter (measured with the caliper) / 2

2. Calculate the volume of the marble using the equation for the volume of a sphere.

   Volume of a sphere = $(4/3)\ \pi\ r^3$

3. Calculate the density of your marble

   Density = mass / volume

Determine the Density of an Irregular Solid Unknown

1. Calculate the volume of the rock

   Volume = Final volume – Initial volume

2. Calculate the density of the rock

   Density = mass / volume