**Paste the Lab in your notebook (p. \_\_\_\_\_).**

**Problem:** How do the densities of 15ml, 50 ml, and 75 ml of water compare.

Prediction: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Materials: 500ml beaker, 100ml graduated cylinder, balance, cup of water

Procedure

1. Calibrate the balance by moving the riders to “0” and point the arrow at “0”.
2. Find the mass of the empty beaker and record the mass in your notebook.
3. Find the mass of 15 ml, 50 ml, and 75 ml of water. Record each mass in your notebook.
   1. Remember: Full beaker of water – empty beaker = mass of water
4. Find the density of each volume of water.

Data Table

|  |  |  |
| --- | --- | --- |
| Volume of water | Mass (g) | Density (g/ml) |
| 15 ml |  |  |
| 50 ml |  |  |
| 75 ml |  |  |
|  |  |  |

Mass of the Empty Beaker: \_\_\_\_\_\_\_\_\_

On the Opposite page of your notebook Complete the following:

Graphing- Draw a line graph displaying your data (mass vs. volume). Include a title and scale. Draw a line of BEST FIT through your data points.

Mass

Volume

1. How do the densities of water compare?
2. You want to compare the densities of different materials. On your line graph plot the mass and volume of the different materials. Predict whether they float or sink in water.

|  |  |  |  |
| --- | --- | --- | --- |
| Material | Volume (ml) | Mass (g) | Prediction (Float or Sink) |
| A | 25 ml | 50 g |  |
| B | 50 ml | 50g |  |
| C | 75mL | 25 g |  |