

DENSITY LAB 1: Density Blocks

QUESTION: If 2 objects are the same VOLUME (size), but different MASS, which is denser?

HYPOTHESIS: _____

TEST:

Materials:

- triple beam balance
- ruler
- 2 blocks
- calculator

Procedure:

- 1) Find the mass of one block and record.
- 2) Find the mass of the other block and record.
- 3) Calculate the volume of each block.
- 4) Divide to calculate Density for each block.
- 5) Predict if the object will sink or float.

RESULTS:

Block color	Mass (g)	Volume (cm³)	Density (g/cm³)	Sink or Float? Prediction!

DENSITY LAB 2: Density of 2 Different Objects

QUESTION: If 2 objects are the same MASS, but different VOLUME (size), which is denser?

HYPOTHESIS: _____

TEST:

Materials:

- triple beam balance
- graduated cylinder & water
- one color cylinder
- another color cylinder
- calculator

Procedure:

- 1) Find the mass of each cylinder using a triple beam balance and record in the table below.
- 2) Find the volume of each cylinder and record in the table below.
- 3) Using the formula, calculate Density for each object.
- 4) Predict whether the cylinder will sink or float.

RESULTS:

Color of Cylinder	Mass (g)	Volume (cm³)	Density (g/cm³)	Sink or Float? <i>Prediction!</i>
_____ Cylinder				
_____ Cylinder				

Density Lab 3: Density of Liquids

QUESTION: Do all liquids have the same density?

HYPOTHESIS: _____

TEST:

Materials:

- triple beam balance
- 4 graduated cylinders
- water
- oil
- corn syrup
- calculator

Procedure:

- 1) Find the mass of each substance in the graduated cylinder. REMEMBER to subtract the mass of an empty graduated cylinder!!
- 2) Use the volume listed below.
- 3) Divide to calculate Density for each liquid.

Type of Liquid	Mass (g) <small>(HINT: subtract the mass of an empty G.C.)</small>	Volume (mL)	Density (g/mL)
Water		____ mL	
Corn Syrup		____ mL	
Oil		____ mL	

Predict, based on your investigations, how these 3 liquids might appear if you poured them all into the same container:

