

Name: _____ Period: _____

Density Mini Lab

Density is how close together the molecules of a substance are or how much mass a substance has in a given space. Based on this definition, your task is to determine the density of the object at your lab station. The materials you have available are listed below. You will need to write a hypothesis or prediction about whether you think your object will float or sink in water. You will also need to write a procedure that you will use to determine the density. Once you have collected your data, you will need to calculate the density of your object and compare your calculated density to that of water (1 g/mL). Finally, you will decide if your object should float or sink in water and justify why, based on your density.

Materials:

Ruler
Balance
600 mL beaker

Water
String
Scissors

Graduated cylinder
Meter stick
Yard stick

Hypothesis:

I predict that my object, _____, will _____ (float/sink) in water.

Procedure:

Your procedure should be written as a list of numbered steps that could be performed by someone unfamiliar with this lab. You may not need all numbers in the procedure, or you may need additional steps.

Procedure for Measuring Mass:

- 1.
- 2.
- 3.
- 4.
- 5.

Procedure for Measuring Volume:

- 1.
- 2.
- 3.
- 4.

Name: _____ Period: _____

5.

Station 1 - Your Object: _____

Data: *Make sure to include your units!*

Mass: _____ Volume: _____

Calculations:

Calculated Density: _____

Will your object float or sink? _____ Why?

Station 2 - Object 2: _____

Data: *Make sure to include your units!*

Mass: _____ Volume: _____

Calculations:

Calculated Density: _____

Name: _____ Period: _____

Will your object float or sink? _____ Why?