

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Density

Purpose: To use density as a means for determining the composition of a variety of unknown substances.

### Materials:

Assorted objects that are regularly and irregularly shaped and of differing compositions

### Equipment:

balance

graduated cylinder

ruler

### Procedure:

Using the items listed under equipment, take the appropriate measurements necessary to find the density of the unknown objects. Your description of what you did will be submitted as part of the lab report.

### Data:

There are two different data tables used in this experiment. Decide which one is best for each object you measure. Construct a data table on the back of this handout for recording your measurements.

Object (letter)	Mass (g)	Length (cm)	Width (cm)	Height (cm)

Object (letter)	Mass (g)	Initial Volume (mL)	Final Volume (mL)

When finished with the experiment, make sure the data table on the webpage is completed.

### Analysis and Discussion:

All necessary calculations for volume and density must be submitted (with work) on separate paper. Furthermore, a brief discussion of how you determined the composition of each unknown should follow. Some unknowns may require greater explanation than others.

### Grading:

Computer submission – 5

Procedure – 15

Analysis (Calculations) – 24

Discussion – 12

Total – 56