Laboratory Exercise 2 sheet:

2A: Density Simulation:

Under the blocks tab in the upper right corner, select same volume.
1. Are all 4 blocks the same shape and size? _____
2. Are all blocks the same mass? _____
3. How much liquid does each block displace?
a. Yellow = _____
b. Blue = _____
c. Red = _____
d. Green = _____
4. Did any blocks displace the same amount? Why or why not?

_____
_____
_____
_____
5. What is the density of each block? You must show work and use units.
a. Yellow = _____   c. Red = _____

b. Blue = _____   d. Green = _____

6. Which blocks floated and which sunk?

_____
_____
7. What is an estimated Density of the liquid? _____
8. Do you hypothesize that red or green has the closest density to the liquid and why?

_____
_____

Part II.
1. What happens when you select same density and then place each block into the liquid?

_____
_____
2. Calculate the volume of the red and blue boxes. As always, be sure to show work and use units.
a. Red = _____   b. Blue = _____

2B Density and % error

Part 1

Unknown metal letter or station number: _____
Mass = _____g
initial volume in graduated cylinder = _____
final volume in graduated cylinder = _____
volume of metal = _____ml or cm^3

Part 2

Density = _____(be sure to include units in answer and show work below)

identity of unknown metal _____
actual value of density _____
% error = _____ (show work below)

possible reason

_____
_____
_____