Name _____ Period _____

Partner _____ Date _____

The Density of Metals Lab

Procedure:

1. Find the mass of an empty and dry 100 mL graduated cylinder using a balance.
2. Fill it half way with one of the metals. Record the volume.
3. Find the mass of the cylinder and metal using a balance.
4. Calculate the mass of the metal alone. It will be the difference between the mass of the empty cylinder and the mass of the cylinder plus metal.
5. Walk around the breakout room and get data from other groups to fill in table 2 below.
6. Answer the questions.

Data:

Table 1

Metal Identification Number	
Mass of Graduated Cylinder (grams)	
Mass of Graduated Cylinder and Metal (grams)	
Mass of Metal alone (grams)	
Volume of Metal (mL)	
Density of Metal (g/mL)	
Identity of Metal	

Table 2

Student's First Name	Identity of metal	Density of Metal (mass divided by volume)

Post Lab Questions:

1) Does a pure metal always have the same density as any other sample of the pure metal?

2) What is the difference between an intensive and extensive property?