**Density Lab**

Purpose: Find the density of each of the 3 objects.

Instrument Use: Be very careful not to scratch, dent, or push on electronic balances.

Procedures/Conclusions: Use the grid to clearly/legibly report the method, calculations, and densities. Report all measurements/answers with **correct metric units and SIGFIGS.**

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|  | **Object 1** | **Object 2** |
| **identity of object** | **Wooden block** | **Metal weight** |
| **mass of object****(include units)** | **8.80 g** | **48.52 g** |
| **method for finding volume (be specific and include units)** | **measurement** | **Water displacement** |
| **formulas or measurements/ calculations used for finding volume****(include units)** | **L x W x H****L = 7.82 cm****W= 3.45 cm****H=2.67** | **Initial water reading = 30.0 mL****Final water reading = 42.5 mL** |
| **volume of object****(include units)** |  |  |
| **formula for density** |  |  |
| **calculation of density for each object****(include units)** |  |  |
| **Density****(include units)** |  |  |

|  |  |
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|  | **Object 3** |
| **identity of object** | **marble** |
| **mass of object****(include units)** | **7.42 g** |
| **method for finding volume (be specific and include units)** | **Water displacement** |
| **formulas or measurements/ calculations used for finding volume****(include units)** | **Initial water reading = 30.0 mL****Final water reading = 32.5 mL** |
| **volume of object****(include units)** |  |
| **formula for density** |  |
| **calculation of density for each object****(include units)** |  |
| **Density****(include units)** |  |

The metal weight is lead. The *accepted* density of lead is11.35 g/mL. Based on your experiment, determine the percent error for density of your metal weight.

$$\% error= \frac{\left|accepted-experimental\right|}{accepted} x 100$$