

Name: _____

Per: _____

Density Lab

IV. Data (be sure to add units)

Tap H₂O

Mass of graduated cylinder: 23.15 g

Mass of graduated cylinder and water: 50.65 g

Volume of liquid in graduated cylinder: 28.1 mL

V. Calculations

Tap Water

Mass of Water

Mass of grad cyl and water	50.65g
<u>-Mass of grad cyl</u>	<u>-23.15g</u>
Mass of water	27.50g

Density Water

$$\text{Density} = \frac{\text{Mass}}{\text{volume}} = \frac{27.50\text{g}}{28.1\text{ml}} = 0.979\text{g/mL}$$

Percent Error (1.00g/ml)

$$\% \text{ Error} = \frac{|\text{measure} - \text{accepted}|}{\text{accepted}} \times 100$$

$$= \frac{|0.979\text{g/mL} - 1.00\text{g/mL}|}{1.00\text{g/mL}} \times 100$$

$$= \frac{0.02}{1.00} \times 100 = 2\%$$