

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

## Density Questions

**Part A:** Circle the correct answer.

1. Density is defined as

- (a)  $\text{mass} \times \text{acceleration}$
- (b)  $\frac{\text{mass}}{\text{volume}}$
- (c)  $\frac{\text{volume}}{\text{mass}}$
- (d)  $\text{mass} \times \text{volume}$

**Part B:** Answer the following questions.

2. Use the given measurements to calculate density.

- (a) mass = 7.2 g, volume = 3 cm<sup>3</sup>
- (b) mass = 5200 g, volume = 2 m<sup>3</sup>
- (c) mass = 6300 g, volume = 9 L

3. A metal sample has a mass of 35 000 kg and a volume of 4.0 m<sup>3</sup>. What is the density of the metal?

4. A metal sample with a mass of 1498 g occupies a volume of 70 cm<sup>3</sup>. Use the table below to identify the metal. (Recall, 1 cm<sup>3</sup> = 1 mL.)

Type of metal	Density
gold	19.3 g/mL
iron	7.9 g/mL
silver	10.5 g/mL
platinum	21.4 g/mL

The metal is \_\_\_\_\_.