

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

## Density Practice Problems

1. Write Equation
2. Plug in Numbers
3. Solve Equation
4. Circle Answer
5. Write Units

$$\text{Density} = \text{Mass}/\text{Volume}$$
$$\text{Volume} = \text{Mass}/\text{Density}$$
$$\text{Mass} = \text{Density} \times \text{Volume}$$

1) A basketball has a **mass** of 612 grams and a **volume** of 7074 cm<sup>3</sup>. What is its **density**? (5pts)

2) A certain metal has a **density** of 8.9g/cm<sup>3</sup>. If a sample of this metal has a **mass** of 10kg, what is its **volume**? (5pts)

3a) How many cubic centimeters (cm<sup>3</sup>) are in 1 cubic meter (1m<sup>3</sup>)? (5pts.)

3b) Water has a **density** of 1g/cm<sup>3</sup>. What is the **mass** (in kilograms) of 1 cubic meter of water (1m<sup>3</sup>)? Hint: Use the answer of 3a for the **volume**. (5pts)

4) 120 cm<sup>3</sup> of some substance has a **mass** of 120 grams. What is the **density** of this material? What is this mystery material? (5pts)