

Name \_\_\_\_\_

Score \_\_\_\_\_

Date \_\_\_\_\_

Blk \_\_\_\_\_

## Density Worksheet

For each question, you must complete three parts, in this order:

Part 1: Write the Formula you will need to use.

2: Substitute the values from the question into your formula

3: Give the answer with the correct units  
(answer to 2 decimal places where necessary)

Fill out the triangle for the Density formula. Then, write out the formula for each part.

**D=**

**M =**

**V=**

1a. Find the density of a substance with a volume of  $5 \text{ cm}^3$  and a mass of 25 g.

1)

2)

3)

b. Will this substance sink or float if placed in water? Explain your answer.

2. Calculate the mass of a substance with a density of  $0.2 \text{ g/cm}^3$  and with a volume of  $45 \text{ cm}^3$ .

1)

2)

3)

3. Find the volume of a substance with a density of  $4 \text{ g/ml}$  and a mass of 4.1 g.

1)

2)

3)

4. Find the mass of a substance with a density of  $8.1 \text{ g/cm}^3$  and a volume of  $2.95 \text{ cm}^3$ .

1)

2)

3)

5. Find the volume of a substance that has a density of  $1.93 \text{ g/cm}^3$  and a mass of 31.3 g.

1)

2)

3)

6. If a substance has a volume of 45.2 ml and a mass of 5 g, find its density.

1)

2)

3)

7. Calculate the volume of a compound that has a density of  $0.90 \text{ g/cm}^3$  if its mass is 7.1 g.

1)

2)

3)

8. What is the mass of a substance whose volume is 3.15 ml and its density is  $0.79 \text{ g/cm}^3$ ?

1)

2)

3)

9a. If a substance has a volume of 5.1 ml and a mass of 2.7 g, what is its density?

1)

2)

3)

b. If this substance was placed in liquid bromine, would it sink or float? Explain your answer.

10. If a compound with a density of  $1.26 \text{ g/cm}^3$  has a volume of 10 ml how much of the compound do you have?

1)

2)

3)