

NAME _____ PERIOD _____ DATE _____

Chemistry: PROPERTIES OF MATTER
WORKSHEET: Density Problems

Finding Density:

- List known values
- Write the formula
- Make substitutions
- Correct answer
- Correct units

WORKSHEET:

1. What is the **density** of 10 ml of corn oil that has a mass of 5 g?

known values	formula	substitution	answer & units

2. If 41.04 g of aluminum has a density 2.7 g/ml, what is its **volume**?

known values	formula	substitution	answer & units

3. The density of a substance is 4 g/ml. What is the **volume** of a piece that's mass is 200 g?

known values	formula	substitution	answer & units

4. The density of gold is 19.3 g/ml. What is the **mass** of 5 ml of gold?

known values	formula	substitution	answer & units

5. If the density of a diamond is 3.4 g/ml, what would be the **mass** of a diamond whose volume is 0.5 ml?

known values	formula	substitution	answer & units

6. What is the **density** of 1353 g of mercury that has a volume of 100 ml?

known values	formula	substitution	answer & units

7. The density of a gold is 19.3 g/ml. What is the **volume** of a gold ring that's mass is 24.125 g?

known values	formula	substitution	answer & units

8. What is the **mass** of 3 ml of vinegar that has a density of 2.3 g/ml?

known values	formula	substitution	answer & units

9. Mary wants to find the density of her new locket. She finds it has a mass of 35 g. She places it in 50 ml of water and the water rises to 55 ml. What is the **density** of the locket?

known values	formula	substitution	answer & units

10. A stone has a mass of 35 grams. The water level was 68 ml before the stone was placed into the water. With the stone in the water, the water level was 75 m. What is the **density** of the stone?

known values	formula	substitution	answer & units