

## Density Problems WS#2

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

1. The mass of a spoon is 7.5 grams and its volume is 3.2 mL. What is the density of the toy spoon?
2. A mechanical pencil has the density of 3 grams per cubic centimeter. The volume of the pencil is 15.8 cubic centimeters. What is the mass of the pencil?
3. A screwdriver has the density of  $5.5 \text{ g/cm}^3$  and a mass of 2.3 g. What is the screwdriver's volume?
4. The density of a sample of gold is  $19.32 \text{ g/cm}^3$ . The volume is  $48.9 \text{ cm}^3$ , what is the mass?
5. Calculate the density ( $\text{g/cm}^3$ ) of an object with a mass of 28.461 g and a volume of  $5.26 \text{ cm}^3$ .
6. The volume of a certain wooden block is  $63 \text{ cm}^3$ . The mass is 11.392 g. Find the density.
7. If the mass of a piece of copper is 26.326 g and its density is  $4.44 \text{ g/cm}^3$ , calculate the volume.
8. Sodium has a density of  $1.95 \text{ g/cm}^3$ . If the volume of some sodium is  $9.0 \text{ cm}^3$ , what is the mass?
9. What is the density of an element if it has a mass of 43.2 g and a volume of 96.5 mL?
10. A sample of a gas has a volume of 4000 mL and a mass of 4.922 g. What is its density?
11. Mercury's density is 13.6g/mL. What is the volume of a sample that has a mass of 2242 g?
12. If a liquid has a density of .880g/mL, what volume of this liquid would have a mass of 54 g?
13. What is the mass of 25 mL of a liquid if its density is 1.25 g/mL?
14. What is the mass of .025 mL of oxygen gas if its density is 1.43 g/mL?
15. The density of an acid is 1.85 g/mL. What volume of the acid would have a mass of 64 g?