

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 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 g/cm^3 . The volume is 48.9 cm^3 , what is the mass?
5. Calculate the density (g/cm^3) of an object with a mass of 28.461 g and a volume of 5.26 cm^3 .
6. The volume of a certain wooden block is 63 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 g/cm^3 , calculate the volume.
8. Sodium has a density of 1.95 g/cm^3 . If the volume of some sodium is 9.0 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 13.6 g/mL . What is the volume of a sample that has a mass of 2242 g?
12. If a liquid has a density of $.880 \text{ g/mL}$, 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?