

Unit 2B Density Practice Problems I Name:

Date:

1. Given a mass of 14 g and a volume of 28 mL, calculate the density.

2. What is the mass of an object with a density of 4.0 g/cm3 that displaces 3.0 cm<sup>3</sup> of water?

3. Given that the density of iron is 11.35 grams per centimeter cubed, what would be the volume of a 1.1 gram piece of iron?

4. Find the density of a block with a length of 8.0 cm, a width of 4.0 cm, a height 2.0 cm, and a mass of 32 g. Would this block float or sink in water?

5. You have two pieces of jewelry. One of them is supposed to be pure silver. The first piece has a mass of 20.0 g and the other piece has a mass of 44.0 g. Both pieces displace 4.0 mL of water. Silver has a density of 10.5 g/cm<sup>3</sup>. Which piece is actually silver?