Unit 2B Density
Name:

1. Given a mass of $\mathbf{1 4} \mathbf{g}$ and a volume of 28 mL , calculate the density.
2. What is the mass of an object with a density of $4.0 \mathrm{~g} / \mathrm{cm} 3$ that displaces $3.0 \mathrm{~cm}^{3}$ 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 $10.5 \mathrm{~g} / \mathrm{cm}^{3}$. Which piece is actually silver?
