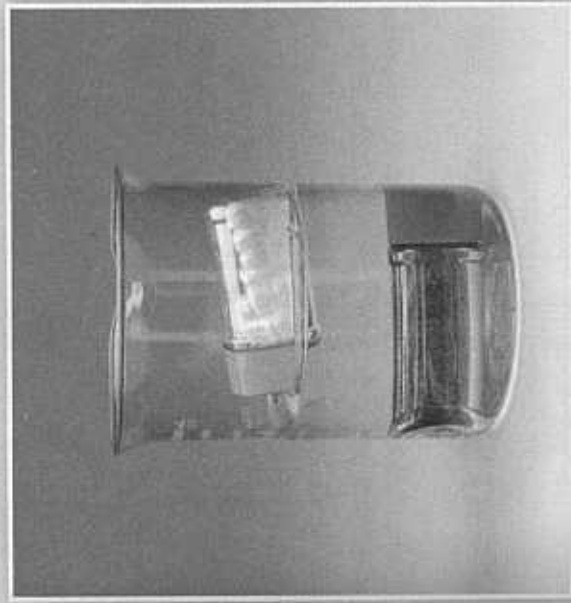


Density is not the same as mass. The **density** of a material is its mass per unit volume. To find the density of a material, measure its mass and its volume. Then divide the mass by the volume. You can follow this rule to find that a 10-mL sample with a mass of 13 g has a density of 1.3 grams per milliliter (g/mL). All amounts of an element or compound that are kept in the same way have the same density. That means that a drop of pure water and a large amount of pure water both have a density of 1 g/mL. This is the density of pure liquid water. Liquids with other densities are not pure water.



**DENSITY** A bottle filled with plastic foam will float. This is because foam is less dense than water. A bottle filled with sand will sink. This is because sand is denser than water.

5. A large drop of mercury has a volume of 4 mL and a mass of 54 g. Calculate the density of mercury. Show your work in the space below. **Circle** your answer.

Blank space for showing work and calculating the density of mercury.

**I Wonder . . .** Do all objects that are the same size have the same density?

Blank lines for writing an answer to the 'I Wonder' question.