

## **Vocabulary: Density via Comparison**

## Vocabulary

- Density the amount of mass in a given volume.
  - Density is calculated by dividing mass by volume:  $D = m \div V$ .
  - o Density of liquids is usually measured in grams per milliliter (g/mL).
  - o Density of solids is usually measured in grams per cubic centimeter (g/cm<sup>3</sup>).
- Mass the amount of matter in an object.
  - In the metric system, the basic units of mass are the gram (g) and kilogram (kg).
     A paper clip has a mass of about one gram.
  - Mass is similar to weight but is not exactly the same. Your weight depends on the gravity of the planet you are on. If you went to the Moon, your mass (amount of matter that makes you up) would be the same, but your weight would be much less than on Earth because the Moon has less gravity than Earth.
- Volume the amount of space an object occupies or takes up.
  - In the metric system, the basic unit of volume is the liter (L), which is about two
    pints.
  - The volume of a small amount of liquid is expressed in *milliliters* (mL), while the volume of a small amount of solid is expressed in cubic centimeters (cm³ or cc).
     One cubic centimeter is equivalent to one milliliter.

