A physical change is a change of matter from one form to another without a change in chemical properties.

1. Which of the following is not an example of a physical change?
   a. Freezing water
   b. Glass breaking
   c. Rusting metal
   d. Bending a nail

   Answer: (c) Rusting metal

A chemical change happens when one or more substances change into an entirely new substance with different properties.

2. Observing different substances over a period of time, what would be the best indicator of a chemical change?
   a. The volume of the substance has changed.
   b. The mass of the substance has changed.
   c. The substance has changed from liquid to solid
   d. The properties of a substance are changed.

   Answer: (d) The properties of a substance are changed

3. When measuring the volume of a liquid, what tool should be used?
   a. A scale
   b. A thermometer
   c. A graduated cylinder
   d. A beaker

   Answer: (c) a graduated cylinder

4. When astronauts collect materials from the moon to return to Earth why is the mass of the objects not a concern when re-entering the Earth’s atmosphere?
   a. The mass of an object does not change.
   b. The shuttle storage areas are very large.
   c. The mass of an object is the same as its weight.
   d. The mass will decrease with gravity.

   Answer: (a) The mass of an object does not change.
5. What is best used when separating a mixture?
   a. A graduated cylinder
   b. A filter
   c. A balance scale
   d. A magnet

   Answer: (b) A filter

6. Matter that contains two or more substances is called a mixture. Mixtures are also divided into two categories, *homogeneous* meaning the mixture has the same definite properties throughout and *heterogeneous* meaning the mixture is not uniform and can be separated. Which of the following would be an example of a heterogeneous mixture?
   a. Burning paper
   b. Margarine
   c. Trail Mix
   d. Mercury

   Answer: (c) Trail Mix

7. Which for the following would be an example of a homogeneous mixture?
   a. Burning paper
   b. Margarine
   c. Trail Mix
   d. Mercury

   Answer: (b) Margarine