

Assess

Reviewing Key Concepts

1. a. Physical properties can be observed without changing pure substances into other substances. Chemical properties can be observed only by changing pure substances into other substances. **b.** Melting point is a physical property because the metal is still the same substance, it is only changing form. **c.** No. The fact that helium does not react with any other substance is a chemical property because it describes helium's ability to change (or not change) into different substances.

2. a. Both elements and compounds are pure substances. While elements are not made of simpler substances, compounds are made up of two or more elements.

b. $C_6H_{12}O_6$ is made up of the elements carbon, hydrogen, and oxygen.

3. a. You can see the different parts of a heterogeneous mixture, but the substances in a homogeneous mixture are so thoroughly mixed that you cannot see them.

b. Seawater is a mixture made up of salt, water, and many other substances. **c.** Sample answer: You could put some of the liquid in an open container. When the water in the solution evaporates, solid baking soda would remain.