CHAPTER 3

Date Class Name

PRETEST

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Atoms and the Periodic Table

- 1. The smallest part of an element that still has the properties of that element is a(n) _____.
 - a. particle

c. atom

b. matter

- d. molecule
- **2.** Which of the following represent elements and which represent compounds?
 - _____ a. O_2
 - _____ **c.** KCl _____ **d.** H₂
 - _____ **e.** Al
 - _____ **f.** NH₃
- **3.** Label each of the following as either a pure substance or a mixture.
 - a. concrete

b. water

c. oxygen

- **d.** air
- **4.** Why do helium-filled balloons and hot-air balloons float in the air?
- **5.** Calculate the density of a substance with a mass of 157 g and a volume of 412 cm³. Can this substance float on water?
- **6.** Which of the following statements about a helium atom in the sun and a helium atom on Earth is false?
 - **a.** They are likely to have the same chemical properties.
 - **b.** They are likely to have similar physical properties.
 - **c.** One will be five times more massive.
 - **d.** Neither one will be very chemically reactive.