Assessment

Chapter 3 Practice Test

Elements, Compounds, and Mixtures

MULTIPLE CHOICE

Circle the letter of the best answer for each question.

1. What pure substance forms when two elements chemically combine?
   a. an element
   b. a compound
   c. a mixture
   d. a solution

2. Why can salt dissolve in water?
   a. Salt is the solvent.
   b. Salt is a solution.
   c. Salt is soluble.
   d. Salt is an element.

3. What is it called when particles in substances separate and spread evenly?
   a. insolubility
   b. dissolving
   c. concentration
   d. suspension

4. How can a compound be broken down?
   a. by physical changes
   b. by chemical changes
   c. by crushing
   d. by cooling
Circle the letter of the best answer for each question.

5. What forms when particles of two or more substances are evenly mixed?
   a. compound
   b. suspension
   c. solution
   d. element

6. Which of the following is a chemical property?
   a. density
   b. reactivity with acid
   c. boiling point
   d. color

7. Which of the following statements about particles in both solutions and colloids is true?
   a. Particles cannot scatter light.
   b. Particles can settle out.
   c. Particles are soluble.
   d. Particles cannot be filtered.

8. Which of the following is NOT true of compounds?
   a. They contain two or more elements.
   b. They form after a physical change.
   c. They have their own physical properties.
   d. They do not form randomly.
MATCHING

Read the description. Then, draw a line from the dot next to each description to the matching word.

9. gelatin
   • a. colloid

10. nugget of gold
    • b. solution

11. water
    • c. element

12. salt dissolved in water
    • d. compound

13. a solid solution of metals or nonmetals dissolved in metals
    • a. alloy

14. an element that shares metal and nonmetal properties
    • b. suspension

15. a mixture of large, dispersed particles
    • c. solvent

16. the substance in which a solute dissolves
    • d. metalloid
FILL-IN-THE-BLANK
Read the words in the box. Read the sentences. Fill in each blank with the word or phrase that best completes the sentence.

| ratio | distillation | nonmetals | nitrogen |

17. A mixture of liquids can be separated by ________________.
18. Bacteria make compounds from ________________ in the air.
19. All ________________ are poor conductors of heat and electric current.
20. Elements join in a specific mass ________________ to form a compound.