

Skills Worksheet

Directed Reading A**Section: Solutions of Acids and Bases****STRENGTHS OF ACIDS AND BASES**

- _____ 1. What is the amount of acid or base dissolved in water called?
- a. concentration
 - b. strength
 - c. pH
 - d. neutralization
- _____ 2. When an acid or base dissolves in water, what is dependent on the number of molecules that break apart?
- a. its concentration
 - b. its weakness
 - c. its durability
 - d. its strength
- _____ 3. In what kind of solution do all the molecules of an acid break apart in water?
- a. a strong acid
 - b. a strong base
 - c. a weak acid
 - d. a weak base
- _____ 4. In what kind of solution do only a few of the molecules of an acid break apart in water?
- a. a strong acid
 - b. a strong base
 - c. a weak acid
 - d. a weak base
- _____ 5. In what kind of solution do all the molecules of a base break apart?
- a. a strong acid
 - b. a strong base
 - c. a weak acid
 - d. a weak base
- _____ 6. What is a solution called when only a few molecules of a base break apart?
- a. a strong acid
 - b. a strong base
 - c. a weak acid
 - d. a weak base

ACIDS, BASES, AND NEUTRALIZATION

- _____ 7. What is the reaction between acids and bases called?
- a. neutralization reaction
 - b. explosion
 - c. strength
 - d. evaporation
- _____ 8. What do the H^+ ions of an acid and the OH^- ions of a base form when they react?
- a. oxygen
 - b. water
 - c. sugar
 - d. hydrogen gas
- _____ 9. What can show whether a solution contains an acid or a base?
- a. an indicator
 - b. pure water
 - c. antacids
 - d. salt

Directed Reading A *continued*

10. A value that is used to express the acidity or basicity (alkalinity) of a system is called _____.

11. The pH of a solution shows the concentration of what type of ion?

12. What is the pH of a neutral solution?

13. What type of solution has a pH greater than 7?

14. What type of solution has a pH less than 7?

15. What are three examples of common materials with a pH of less than 7?

16. What are three examples of common materials with a pH of more than 7?

For each organism listed, write the preferred pH or pH range.

_____ **17.** pine trees

_____ **18.** lettuce

_____ **19.** fish