

**Section 3 ■ Acids, Bases, and Salts**  
**Section 4 ■ Strength of Acids and Bases**

**Directions:** Match the description in the first column with the term in the second column by writing the correct letter in the space provided.

**Column I**

- \_\_\_\_\_ 1. hydroxide ion
- \_\_\_\_\_ 2. an organic compound that changes color in an acid or a base
- \_\_\_\_\_ 3. a term for a solution with pH 7
- \_\_\_\_\_ 4. the point at which a base permanently changes the color of an acid solution
- \_\_\_\_\_ 5. a solution of known concentration used in the process of titration
- \_\_\_\_\_ 6. a term that considers the ratio of solute to solvent in a solution
- \_\_\_\_\_ 7. a substance that produces hydrogen ions in solution
- \_\_\_\_\_ 8. a reaction that produces a salt and water
- \_\_\_\_\_ 9. a term that refers to the concentration of an acid or a base
- \_\_\_\_\_ 10. a term that indicates the acidity of a solution
- \_\_\_\_\_ 11. a substance that produces hydroxide ions in solution
- \_\_\_\_\_ 12. a process that uses a solution of known concentration to determine the concentration of another solution
- \_\_\_\_\_ 13. an acid that ionizes almost completely in solution
- \_\_\_\_\_ 14. a compound formed when negative ions from an acid combine with positive ions from a base

**Column II**

- a. acid
- b. base
- c. strong acid
- d. dilute
- e. indicator
- f. pH
- g. standard solution
- h. salt
- i. endpoint
- j. neutralization
- k. titration
- l. concentration
- m. neutral
- n.  $\text{OH}^-$

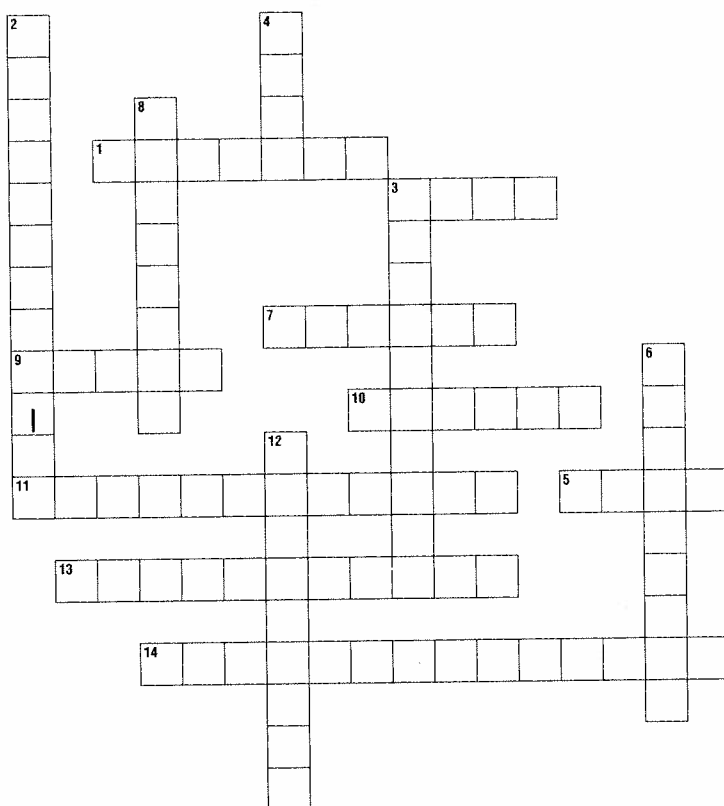


## Key Terms

### Solutions, Acids, and Bases

Directions: Use the following terms to complete the crossword puzzle.

alloy      concentrated      solution      solvent      dissociation  
 acid      base      indicator      titration      salt  
 solute      dilute      electrolyte      neutralization      solubility



#### Across

- substance doing the dissolving
- compound formed when negative ions from acid combine with positive ions from base
- substance that produces hydrogen ions in solution
- substance being dissolved
- solid solution formed by heating metals
- process that affects weakness or strength of solution
- process by which particles in crystalline solids separate and draw into solution
- substance that separates into ions or forms ions in a water solution
- chemical reaction between acid and base that takes place in water solution

#### Down

- a high ratio of solute to solvent in a solution
- maximum amount of solute that can be dissolved in given amount of solvent
- substance that forms hydroxide ions in solution
- organic compound that changes color in acid or base
- mixture that has same composition, color, density, and taste throughout
- process used to determine concentration of a solution by using a solution of known concentration