

Acids, Bases, and Solutions ▪ *Reading/Notetaking Guide***Understanding Solutions** (pp. 256–261)

This section explains what happens to particles of substances in a solution. It also describes properties of solutions.

Use Target Reading Skills

As you read, make an outline about solutions. Use the red headings for the main ideas and the blue headings for the supporting ideas.

Understanding Solutions
I. What Is a Solution?
A. Solutions With Water
B.
II.
A.
B.
III.
A.
B.
IV.
A.
B.

Acids, Bases, and Solutions ▪ *Reading/Notetaking Guide***Understanding Solutions** *(continued)*

10. How does a suspension differ from a solution?

Particles in a Solution (p. 259)

11. What happens to the solute's particles whenever a solution forms?

12. Circle the letter of each sentence that is true about particles in a solution.

- a. When an ionic solid mixes with water, its ions repel water molecules.
- b. When a molecular solid mixes with water, the covalent bonds within molecules are broken.
- c. When an ionic solid mixes with water, water molecules surround each ion.
- d. When a molecular solid mixes with water, the solute breaks down into individual molecules.

13. Which solution will conduct electric current, a sugar solution or a salt solution?

Effects of Solutes on Solvents (pp. 260–261)

14. Circle the letter of each sentence that is true about the effects of solutes on solvents.

- a. Solutes raise the boiling point of a solvent.
- b. The temperature must drop lower than 0°C for water to freeze when a solute is dissolved in the water.
- c. Solutes raise the freezing point of a solvent.
- d. Antifreeze boils at a lower temperature than pure water.