

SECTION

2

Study Guide

Solubility

Chapter

3

Directions: Write **true** in the blank if the statement is true. If the statement is false, replace the italicized word with a word or term that makes the statement true. Write this new word in the blank.

- _____ 1. In the water molecule, electrons are *equally* shared by hydrogen atoms and oxygen atoms.
- _____ 2. Solutions for which water is the solvent are called *aqueous* solutions.
- _____ 3. If electrons are shared *equally* between atoms that compose a molecule, that molecule is said to be polar.
- _____ 4. Water readily dissolves most *polar* compounds.
- _____ 5. Table salt, NaCl, is a *molecular* compound.
- _____ 6. In an *ionic* compound, one or more atoms loses electrons, and one or more atoms gains electrons.
- _____ 7. In solution, the charged regions of water molecules can pull a(n) *ionic* compound apart.
- _____ 8. Chemists say, "Like dissolves like." This means that dissolution tends to occur when the *solid* and the solute are similar in nature.
- _____ 9. Most oils tend to dissolve best in *nonpolar* solvents.
- _____ 10. Solubility tells you how *fast* a solute will dissolve.

Directions: Answer the following questions on the lines provided.

11. How is the solubility of a substance usually described?

12. What is an unsaturated solution?

13. How can a solution become supersaturated?

14. What happens if you continue to add solute to a saturated solution?

15. Can pressure affect the solubility of a substance in solution? Explain.

16. How does temperature affect the solubility of a solute in solvent?
