

## Chapter 22

Use with Section 2

## REINFORCEMENT

## ● Aqueous Solutions

Write "true" in the blank if the statement is true. If the statement is false, replace the italicized word with a word 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(n) *molecular* compound.
- \_\_\_\_\_ 6. In a(n) *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. A few oils, such as olive oil and safflower oil, mix with water because they are somewhat *nonpolar*.

Complete the following. Write your answers on the lines provided.

11. What does the word *soluble* mean? \_\_\_\_\_
- \_\_\_\_\_
12. How is the solubility of a substance usually described? \_\_\_\_\_
- \_\_\_\_\_
13. What is an unsaturated solution? \_\_\_\_\_
- \_\_\_\_\_
14. Name three ways in which you can increase the speed at which a solute dissolves.
- \_\_\_\_\_
- \_\_\_\_\_
15. What happens if you continue to add solute to a saturated solution? \_\_\_\_\_
- \_\_\_\_\_
16. Compare the terms *concentrated* and *dilute* with respect to solutions. \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
17. Can pressure affect the solubility of a substance in solution? Explain. \_\_\_\_\_
- \_\_\_\_\_
18. How does temperature affect the solubility of a solute in solvent? \_\_\_\_\_
- \_\_\_\_\_