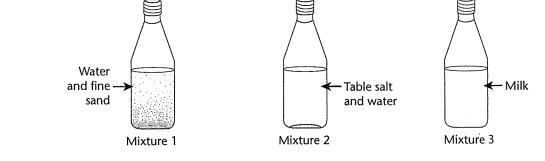
## Review and Reinforce

# Understanding Solutions

## **Understanding Main Ideas**

The diagram below shows three mixtures. Identify each mixture as a solution, colloid, or suspension. Explain.



- Answer the following questions on a separate sheet of paper.
- 4. Compare and contrast what happens to the particles of an ionic solid and a molecular solid when each mixes with water.
- 5. What are two ways that solutes affect the properties of solvents?

## **Building Vocabulary**

Fill in the blank to complete each statement.

- 6. The part of a solution that is present in the smaller amount is the \_\_\_\_\_.
- 7. The part of a solution that is present in a larger amount is the \_\_\_\_\_\_
- 8. A(n) \_\_\_\_\_\_ is a mixture containing small, undissolved particles that do not settle out, but are large enough to scatter light.
- 9. A mixture in which particles can be seen and easily separated by settling or filtration is called a(n) \_\_\_\_\_\_
- 10. A well-mixed mixture that contains a solvent and at least one solute is called

Date Class

## Review and Reinforce

# Concentration and Solubility

#### **Understanding Main Ideas**

Answer the following questions in the spaces provided. Use a separate sheet of paper if you need more room.

- 1. What amounts do you compare when measuring concentration?
- 2. How can you tell that a white powder is salt without tasting it?
- 3. Which solution will have more gas dissolved in it, a solution under high pressure or one under low pressure?
- **4.** How does temperature affect the solubility of most solids?

## **Building Vocabulary**

Match each term with its definition by writing the letter of the correct definition in the right column on the line beside the term in the left column.

- 5. \_\_\_ dilute solution
- **6.** \_\_\_ concentrated solution
- **7.** \_\_\_ solubility
- **8.** \_\_\_ saturated solution
- a. a measure of how much solute can dissolve in a solvent at a given temperature
- b. a solution that has so much solute that no more can dissolve
- c. a solution that has only a little solute
- d. a solution that has a lot of solute

## Review and Reinforce

# Describing Acids and Bases

## **Understanding Main Ideas**

Answer the following questions in the spaces provided.

- 1. When found in foods, what does an acid taste like?
- 2. When found in foods, what does a base taste like?
- 3. Compare how an acid and a base will each react with the metals magnesium, zinc, and iron.
- 4. Compare how an acid and a base will each react with carbonate ions.
- 5. What color does an acid turn litmus paper?
- 6. What color does a base turn litmus paper?
- 7. What is neutralization?

## **Building Vocabulary**

On a separate sheet of paper, write a definition for each of these terms.

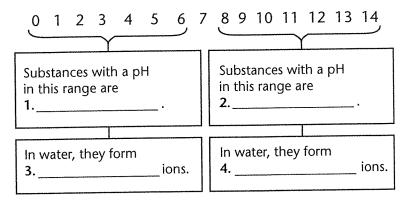
- 8. corrosive
- 9. indicator

## Review and Reinforce

## Acids and Bases in Solution

## **Understanding Main Ideas**

Complete the concept map shown below and answer the following questions on a separate sheet of paper.



- 5. What is the difference between a strong acid and a weak acid?
- 6. What is the difference between a strong base and a weak base?
- 7. Which solution has a greater concentration of hydrogen ions (H+), a solution with a pH of 3 or one with a pH of 7? Explain.
- 8. What are the products formed when a base reacts with an acid?
- 9. What is the pH of a neutral solution?

## **Building Vocabulary**

Match each term with its definition by writing the letter of the correct definition in the right column on the line beside the term in the left column.

- **10.** \_\_\_ hydrogen ion
- **11.** \_\_\_ pH scale
- 12. \_\_\_ neutralization ...
- 13. \_\_\_ salt
- **14.** \_\_\_ hydroxide ion

- a. ionic compound that can form from the reaction of an acid with a base
- b. reaction between an acid and a base
- c. H+
- d. series of numbers that indicates the concentration of hydrogen ions in solution
- e. OH-