

## SECTION

## 1

## Study Guide

## What is a solution?

## Chapter

## 3

**Directions:** Match the terms in the word bank with the phrases below by writing the word in the blank. You must use all the words and may use each word only once.

alloy  
compound  
heterogeneous mixture

homogeneous mixture  
precipitate  
stalagmite

stalactite  
solute  
solvent

- \_\_\_\_\_ 1. for example, sugar in cola
- \_\_\_\_\_ 2. a hanging icicle of rock formed by dripping water in a cave
- \_\_\_\_\_ 3. a solid-solid solution, such as brass
- \_\_\_\_\_ 4. for example, mixed fruit salad
- \_\_\_\_\_ 5. a solid formed when two solutions mix, such as soap scum
- \_\_\_\_\_ 6. a column of rock that forms upward from the floor of a cave as water with dissolved rock drips on it
- \_\_\_\_\_ 7. something that dissolves a solute, such as the water in the ocean
- \_\_\_\_\_ 8. two or more substances that are evenly mixed on a molecular level but are not bonded
- \_\_\_\_\_ 9. for example, water, which always has the same ratio of hydrogen and oxygen atoms

**Directions:** Decide if each process is a physical or chemical process and write your answer in the column. Decide what kind of mixture is described in each case and name it in the second column. Identify the parts of the mixture.

		Physical or Chemical?	Kind of Mixture	Parts of Mixture
10.	a chef caramelizing sugar and butter for a sauce			
11.	a carpenter pounding nails into a house frame			
12.	a painter mixing two colors of paint together			
13.	a clown blowing up balloons			
14.	a cleaner using bleach to clean stains from clothes			

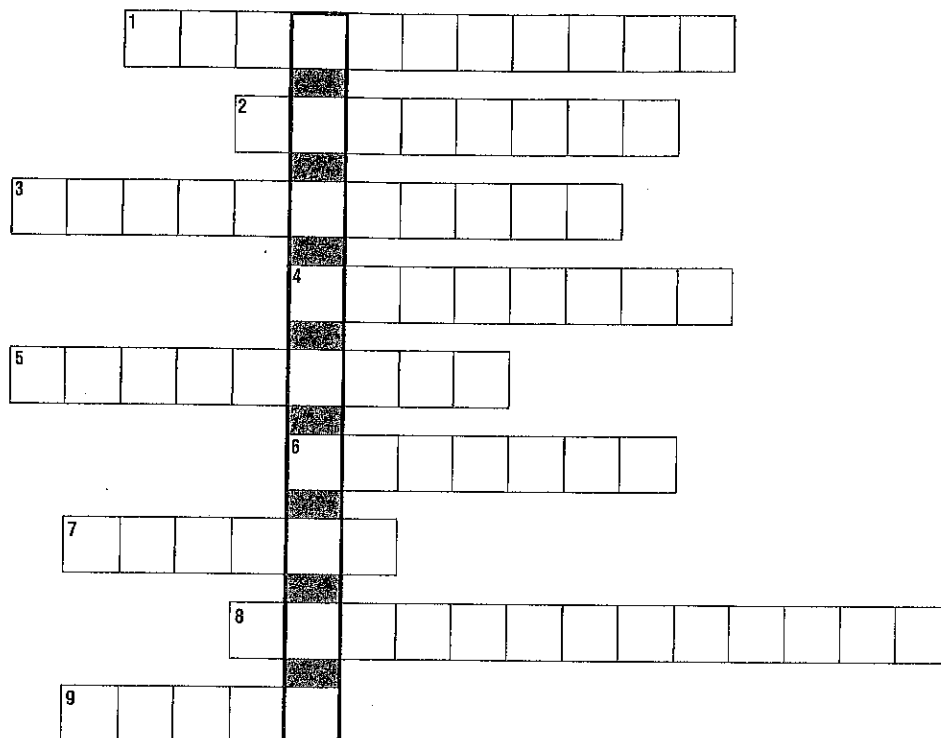
## SECTION

## 1

## Reinforcement

## What is a solution?

**Directions:** Use the clues below to fill in the rows of the word puzzle. When the puzzle is completed correctly, the vertical boxes will spell out a mystery word.



- To clean the shower, you must remove a \_\_\_\_\_ formed by tap water and soap.
- Elements and compounds cannot be broken down into simpler substances by an ordinary \_\_\_\_\_ process.
- A \_\_\_\_\_ mixture contains two or more substances that are evenly mixed.
- Substances that can be separated by physical means are known as \_\_\_\_\_.
- Seawater and carbonated beverages have something in common. They're both \_\_\_\_\_.
- A substance that makes something dissolve is a \_\_\_\_\_.
- The substance that dissolves in a solution is the \_\_\_\_\_.
- During the process of \_\_\_\_\_, the gases that make up the solution we breathe are separated.
- A solid-in-solid solution of two metals is known as a(n) \_\_\_\_\_.
- The mystery word is \_\_\_\_\_.