



SECTION 17-2 REVIEW AND REINFORCE

Describing Chemical Reactions

◆ Understanding Main Ideas

Balance the equations on the lines below. State whether the reaction is a synthesis, decomposition, or replacement reaction.

Given Equation	Balanced Equation	Type of Reaction
$FeS + HCl \rightarrow FeCl_2 + H_2S$	$FeS + [2]HCl \rightarrow FeCl_2 + H_2S$	Replacement
$Na + F_2 \rightarrow NaF$	$[2]Na + F_2 \rightarrow [2]NaF$	Synthesis
$HgO \rightarrow Hg + O_2$	$[2]HgO \rightarrow [2]Hg + O_2$	decomposition

Answer the following questions on the back of this page or on a separate sheet of paper.

- Describe in words the chemical composition of the molecules involved and the reaction represented by the equation: $2H_2 + O_2 \rightarrow 2H_2O$.
2 molecules of hydrogen combine with 1 molecule of oxygen to form 2 molecules of water.
- Use the principle of conservation of mass to explain why the equation above is balanced.
Both the reactants and the product contain the same number of atoms of each element.

◆ 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.

<u>D</u> 3. chemical equation	a. materials present after a reaction
<u>C</u> 4. chemical formula	b. reaction where substances combine to form a more complex compound
<u>I</u> 5. decomposition	c. a combination of symbols that identifies the elements in a compound
<u>H</u> 6. coefficient	d. uses symbols to show chemical reactions
<u>A</u> 7. products	e. reaction where one element replaces another in a compound
<u>G</u> 8. reactants	f. number that tells the ratio of atoms in a formula
<u>J</u> 9. conservation of mass	g. materials present before a reaction
<u>B</u> 10. synthesis	h. number telling how many molecules are involved in a chemical reaction
<u>E</u> 11. replacement reaction	i. reaction where compounds are broken down into simpler products
<u>F</u> 12. subscript	j. matter is not created or destroyed during a chemical reaction