Name _____ Date _____ Class _____

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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
1. $FeS + HCl \rightarrow FeCl_2 + H_2S$	a.	b.
2. $Na + F_2 \rightarrow NaF$	a.	b.
3. $HgO \rightarrow Hg + O_2$	a.	b.

Answer questions 4 and 5 on the back of this paper.

4. Describe in words the reaction represented by the equation: $2\,H_2 + O_2 \rightarrow 2\,H_2O$. Include a description of the composition of each kind of molecule.
5. Use the principle of conservation of matter to explain why the equation in question 4 is balanced.

Building Vocabulary

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

____ 6. chemical equation

____ 7. decomposition

____ 8. coefficient

____ 9. product

____ 10. reactant

____ 11. conservation of matter

____ 12. synthesis

____ 13. replacement

a. substance present after a reaction

b. reaction in which substances combine to form a more complex compound

c. uses symbols and formulas to show chemical reactions

d. reaction in which one element replaces another in a compound

e. substance present before a reaction

f. number telling how many molecules of a substance are involved in a chemical reaction

g. reaction in which compounds are broken down into simpler products

h. principle that states that matter is not created or destroyed during a chemical reaction