

Directed Reading A

Section: Forming New Substances

1. The color of leaves that contain chlorophyll is _____.
2. Why are leaves orange and yellow in the fall?

CHEMICAL REACTIONS

- _____ 3. Which of the following names the process by which chlorophyll breaks down into new substances?
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|-----------------------|----------------------|
| a. chemical substance | c. chemical mixture |
| b. chemical reaction | d. chemical solution |

4. A process in which one or more substances change to form new substances is called a(n) _____.

5. How do the properties of the new substances compare with the properties of the original substances after a chemical change takes place?

6. A solid substance that is formed in a solution is called a(n)

_____.

Match the correct example of a chemical reaction with the correct clue. Write the letter in the space provided.

- | | |
|--|--------------------|
| _____ 7. thermal energy produced by a fire | a. color change |
| _____ 8. precipitate | b. energy change |
| _____ 9. bubbles | c. solid formation |
| _____ 10. white spots caused by bleach | d. gas formation |

Directed Reading A *continued*

11. What can you conclude is happening if a reaction has more than one of the signs mentioned above?

12. What is the most important sign that a chemical reaction is occurring?

13. When a gas is given off as a liquid boils, it is an example of a _____ change, not a _____ reaction.

BONDS: HOLDING MOLECULES TOGETHER

14. What is a chemical bond?

15. What is the relationship between a chemical reaction and the making and breaking of chemical bonds?

16. What makes chemical bonds break?

17. How many atoms make up a diatomic molecule?
