

Directed Reading B

Section: Forming New Substances

1. The pigment that makes leaves green is called _____.
2. Why are leaves orange and yellow in the fall?

CHEMICAL REACTIONS

3. A process in which one or more substances change to form new substances is called a(n) _____.
4. How do the properties of the new substances compare with the properties of the original substances after a chemical change takes place?

5. 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.

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|---------------------------------------|---------------------------|
| _____ 6. Thermal energy is given off. | a. color change |
| _____ 7. Precipitate forms. | b. energy change |
| _____ 8. Nitrogen dioxide forms. | c. solid formation |
| _____ 9. Bleach spots form. | d. gas formation |
10. When a gas is given off as a liquid boils, it is an example of a(n) _____ change, not a(n) _____ reaction.

Directed Reading B *continued*

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

BONDS: HOLDING MOLECULES TOGETHER

12. What is a chemical bond?

13. How do new substances form during a chemical reaction?

14. What causes chemical bonds to break?

15. How many atoms make up a diatomic molecule?

16. What substance forms from the reaction of hydrogen and chlorine gas?

REACTIONS AND ENERGY

17. In an exothermic reaction, heat is _____. In an endothermic reaction, heat is _____.

Directed Reading B *continued*

18. What types of energy are released in exothermic reactions?

19. What does the law of conservation of energy state?
