

Chemical Reactions

◆ **Multiple Choice**

Write the letter of the correct answer on the line at the left.

1. A change in matter that produces new substances is called a

- a. chemical reaction.
- b. physical change.
- c. mixture.
- d. solution.

3. A number that is written smaller and lower than the letter symbols in a chemical formula and that shows how many atoms of a substance are in a molecule is called a(n)

- a. coefficient.
- b. element.
- c. subscript.
- d. superscript.

4. The rate of a chemical reaction can be decreased by increasing

- a. temperature.
- b. surface area of reactants.
- c. amount of inhibitor.
- d. concentration of reactants.

5. In a balanced chemical equation, both sides should have the same

- a. number of molecules.
- b. number of atoms.
- c. number of coefficients.
- d. number of subscripts.

6. If a reaction absorbs energy, it is called a(n)

- a. replacement reaction.
- b. decomposition reaction.
- c. endothermic reaction.
- d. exothermic reaction.

7. When two or more substances combine to form a more complex substance, the process is called a

- a. decomposition reaction.
- b. replacement reaction.
- c. synthesis reaction.
- d. physical change.

8. The number in front of a chemical formula that tells how many molecules or atoms of each reactant take part in a reaction is called the

- a. symbol.
- b. subscript.
- c. coefficient.
- d. concentration.