

## Unit 6 Study Guide

Describe how chemical reactions occur.

List signs that a chemical reaction has occurred.

Describe how to write chemical equations.

Demonstrate how to balance chemical equations.

Relate the law of conservation of mass to balancing chemical equations.

Explain the symbols (s), (l), (aq), (cr) and (g) seen in some chemical equations.

Explain the use of coefficients.

Explain why subscripts should not be changed in a chemical equation.

Explain how synthesis reactions occur and be able to recognize them in equation form.

Describe how decomposition reactions occur and be able to recognize them in equation form..

Describe single and double replacement reactions and be able to recognize them in equation form..

Explain how combustion reactions occur and be able to recognize them in equation form. •

Describe endothermic reactions.

Describe exothermic reactions.

Relate the law of conservation of energy to chemical reactions.

Define activation energy.

Identify factors that affect the rates of chemical reactions.

Know the definitions of:

chemical reaction, equilibrium, product, reactant, chemical equation, combustion reaction, decomposition reaction, single displacement reaction, double displacement, synthesis reaction, activation energy, catalyst, concentration, endothermic reaction, exothermic reaction, law of conservation of energy, reaction rate