REVIEW

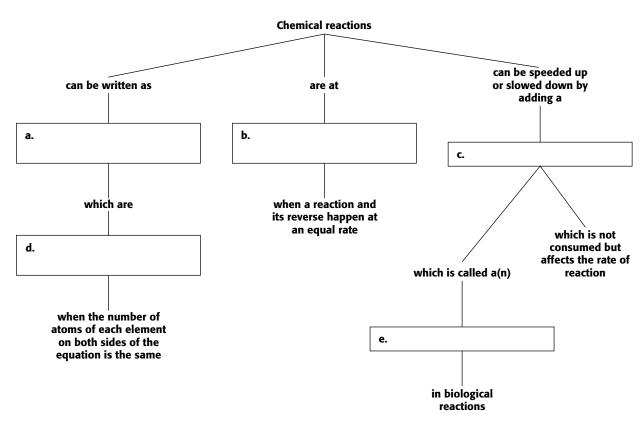
CHAPTER 5

Mixed Review

- 1. Creative Thinking Foods kept in a refrigerator stay fresh longer than foods left out on the counter. Explain why this is true.
- 2. Applying Concepts Silver chlorate, AgClO₃, produces silver chloride, AgCl, and oxygen, O_2 , when heated.
 - **a.** Identify the reactants and products of this chemical reaction.
 - **b.** Write the equation for the reaction.
 - **c.** Balance the equation for the reaction.
- **3. Applying Concepts** Predict the product or products of the following general descriptions of chemical reactions, and then name the type of reaction.
 - a. $A + B \rightarrow$
 - **b.** AB \rightarrow
 - c. $AX + BY \rightarrow$
 - **d.** $AX + B \rightarrow$
- **4. Creative Thinking** Compare a chemical reaction at equilibrium with a game of tug-ofwar.

Chapter 5 Mixed Review, continued

- **5. Critical Thinking** The following chemical reaction takes place during the process of respiration: $C_6H_{12}O_6 + 6O_2 \rightarrow 6H_2O + 6CO_2 + energy$
 - **a.** What are the products of this reaction?
 - **b.** Is energy absorbed or released?
 - **c.** Since the law of conservation of energy states that energy cannot be created or destroyed, where do you think the energy for the chemical process of respiration is derived? (**Hint:** What are the reactants?)
- **6. Concept Mapping** Complete the concept map below by writing the correct word or phrase in the lettered boxes.



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