Chemical Interactions 3.1 Section Review (p. 76) Questions w/Answers

Q1. How do physical changes differ from chemical changes? Explain

A physical change alters the characteristics of a substance, but not the substance itself. A chemical change produces different substances.

Q2. Describe four types of evidence of a chemical reaction.

A color change, formation of a precipitate or a gas, or temperature changes are the evidences of a chemical reaction.

Q3. Describe the ways in which the rate of a chemical reaction can be changed.

Change the concentration, surface area or temperature of reactants, or add a catalyst in order to change the rate of reaction.

Q4. What evidence shows that the burning of methane is a chemical reaction?

A change in temperature and the production of gases is the evidence.

Q5. What about combustion reactions makes them different from either synthesis or decomposition reactions?

Oxygen is always a reactant, and another reactant often contains carbon and hydrogen.

Q6. How might the chewing of food be related to the rate of a chemical reaction-digestion- that occurs in your body? Explain.

Chewing increases the surface area of food, which speeds up chemical reactions involved in digestion.