Chemical Reactions (page 49)

1. What is a chemical reaction? _____

_____

2. In the space provided, write a definition for each of the terms

	Definition
Reactants	
Products	

3. Chemical reactions always involve changes in chemical _____.

Energy in Reactions (page 50)

4. What is released or absorbed whenever chemical bonds form or are broken?

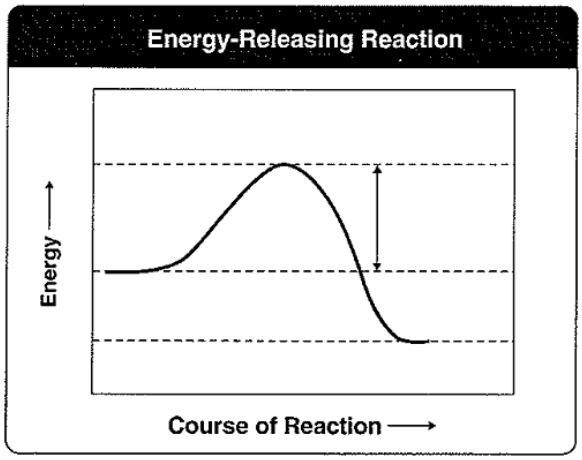
_____

5. What do chemical reactions that absorb energy need to occur? _____

_____

6. Chemists call the energy needed to get a reaction started the _____.

7. Complete the graph of an energy-releasing reaction by indicating where the energy of the reactants, the energy of the products, and the activation energy should appear.



Enzymes (pages 51–52)

8. What is a catalyst? _____

_____

9. Proteins that act as biological catalysts are called _____.

10. What do enzymes do? _____

_____

11. What is part of an enzyme's name usually derived from? _____

_____

_____

Enzyme Action (pages 52–53)

12. The reactants of enzyme-catalyzed reactions are known as _____.

13. Why are the active site and the substrates in an enzyme-catalyzed reaction often compared to a lock and key? _____

_____

_____

14. The binding together of an enzyme and a substrate forms a(an) _____.

15. How do most cells regulate the activity of enzymes? _____

_____

_____

_____