

## Chapter 2.5: Enzymes

### KEY CONCEPT

Enzymes are catalysts for chemical reactions in living things.

### VOCABULARY

catalyst	substrate
enzyme	

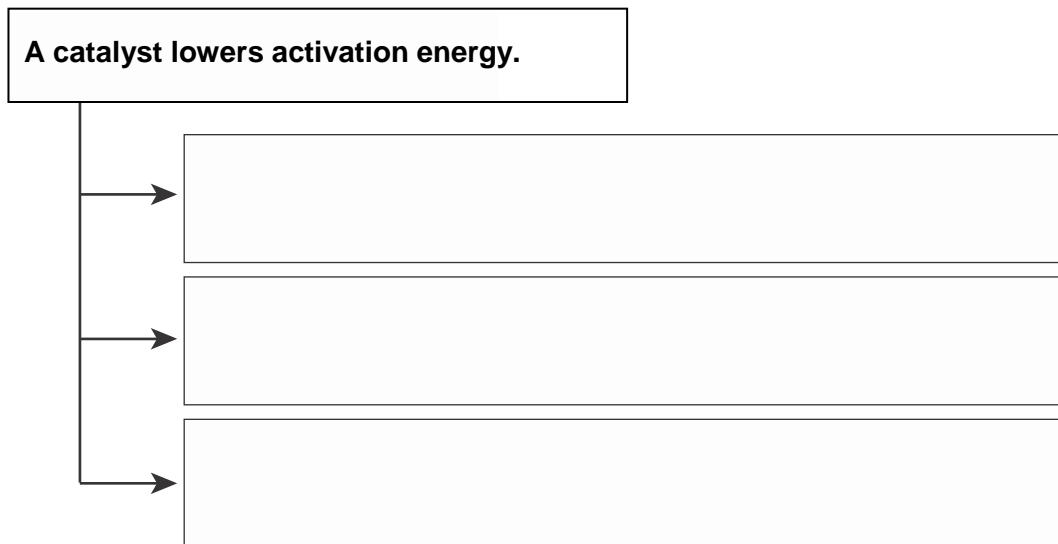
**MAIN IDEA:** A catalyst lowers activation energy.

1. What is activation energy?

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2. Take notes about catalysts in the chart below. In the first two boxes, write detail notes about the main functions of catalysts. In the third box, write a detail about another characteristic.



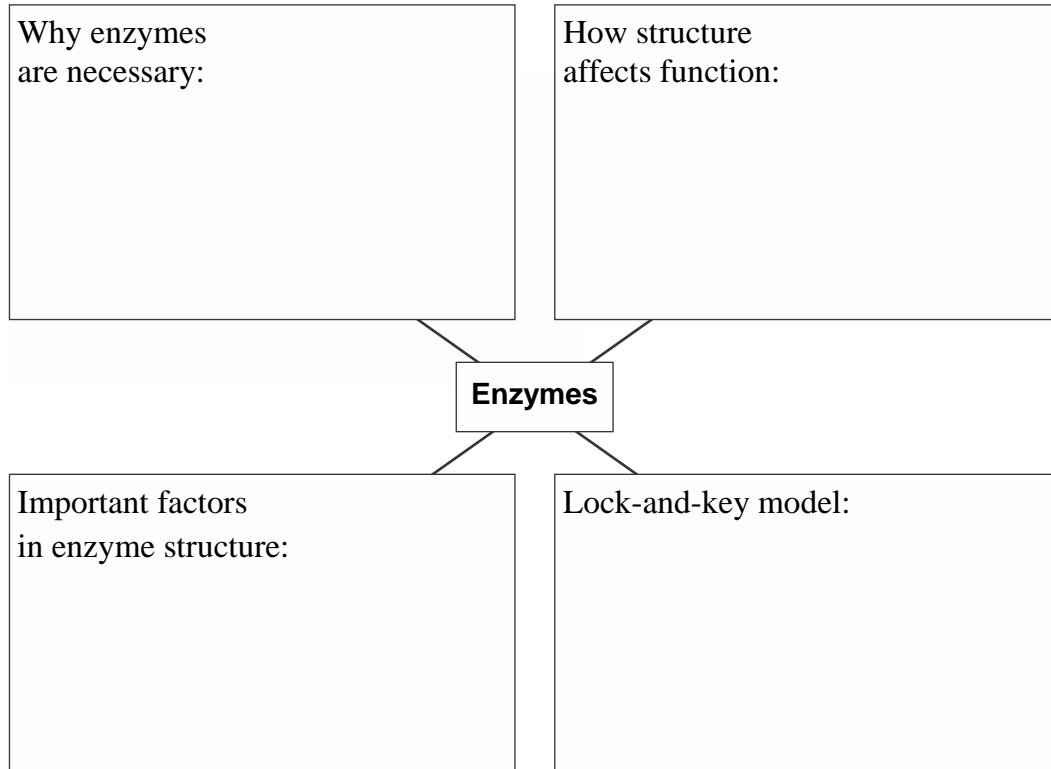
3. When a catalyst is present, *more / less* activation energy is needed to start a chemical reaction.

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Study Guide B *continued*

**MAIN IDEA:** Enzymes allow chemical reactions to occur under tightly controlled conditions.

4. Take notes about enzymes by filling in the Main Idea Web below.



5. How do enzymes weaken the bonds in substrates?

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### Vocabulary Check

6. The word *catalyst* comes from the Greek word meaning “to dissolve.” How does this definition relate to the meaning of *catalyst*?

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7. How are substrates like keys and enzymes like locks?

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