

PRACTICE QUIZ:

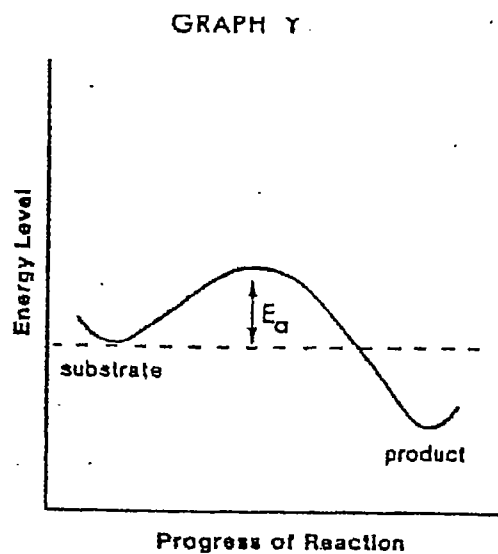
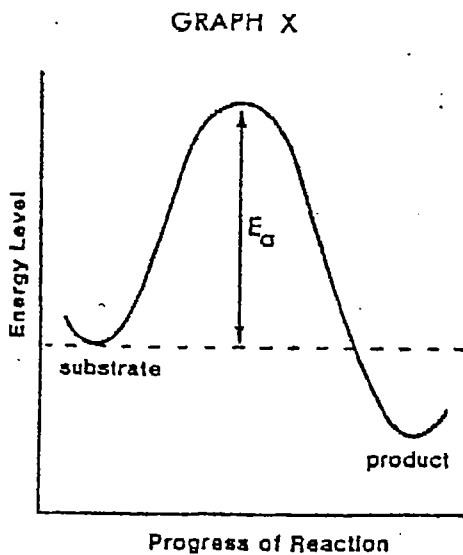
1. The function of enzymes is to:
 - A. provide the cell with vitamins.
 - B. reduce the energy of activation in a reaction.
 - C. provide the energy needed to carry out a reaction.
 - D. reduce the number of collisions between molecules.

2. When the active site of an enzyme is denatured,
 - A. substrates cannot be formed.
 - B. a quaternary structure is achieved.
 - C. the activation energy is decreased.
 - D. an enzyme-substrate complex cannot be formed.

3. The reactant in an enzyme-catalyzed reaction can also be called
 - A. a complex.
 - B. a substrate.
 - C. an enzyme.
 - D. a coenzyme.

4. A non-protein molecule that aids the action of an enzyme to which it is loosely bound is called a(n)
 - A. initiator.
 - B. coenzyme.
 - C. competitive inhibitor.
 - D. enzyme-substrate complex.

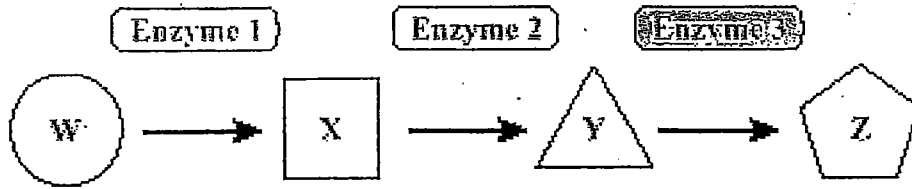
5. E_a is greater in graph X than in graph Y. The **BEST** explanation for this is that the energy of activation in Y is:



E_a = energy of activation

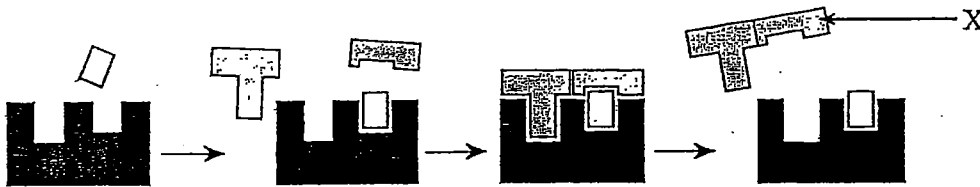
- A. raised by the addition of an enzyme.
- B. lowered by the addition of an enzyme.
- C. raised by the addition of more substrate.
- D. lowered by the addition of more substrate.

6. If substance Z inhibits enzyme 2, this will in turn inhibit the production of
Metabolic Pathway



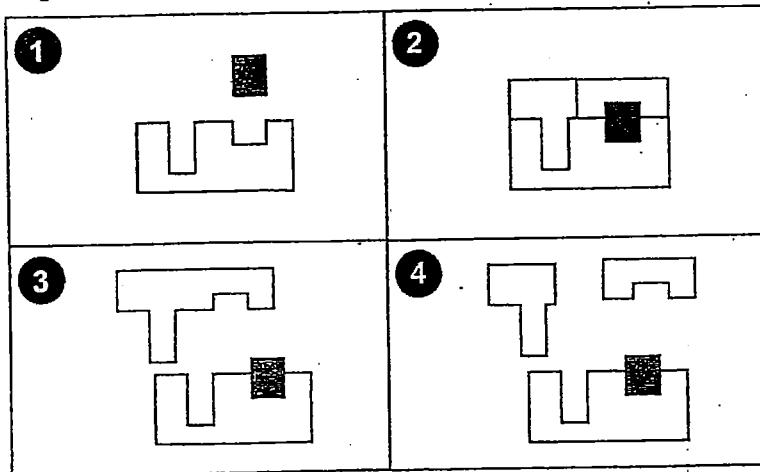
- A. enzyme 1. B. enzyme 2. C. substance W. D. substance Y.

7 The structure below labelled X is the



- A. product. B. enzyme.
 C. substrate. D. enzyme-substrate complex.

8. To represent the "lock and key" model of enzymatic action, in which order would the diagrams below have to be placed?

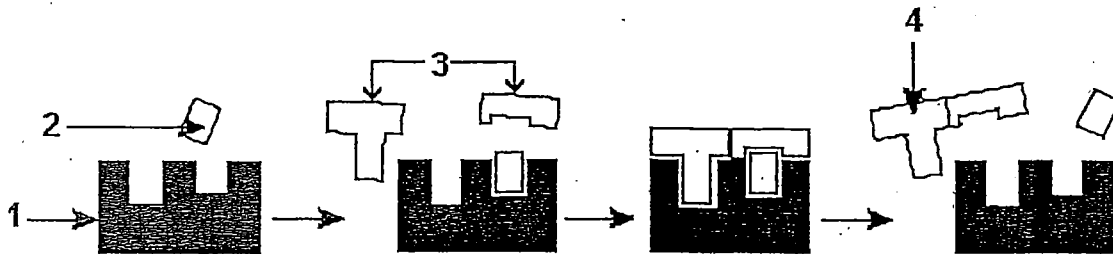


- A. 1 • 2 • 3 • 4 B. 1 • 4 • 2 • 3
 C. 2 • 3 • 4 • 1 D. 2 • 4 • 3 • 1

9. The molecule that fits into the enzyme's active site is the
 A. codon. B. vitamin. C. substrate. D. coenzyme.

10 Vitamins function as
 A. enzymes. B. coenzymes.
 C. emulsifiers. D. competitive inhibitors.

11. In the reaction shown, which number represents a coenzyme?



A. 1

B. 2

C. 3

D. 4

12. The role of an enzyme in a chemical reaction is to

A. emulsify fats.

B. prevent denaturation.

C. speed up the reaction.

D. buffer any acids or bases.