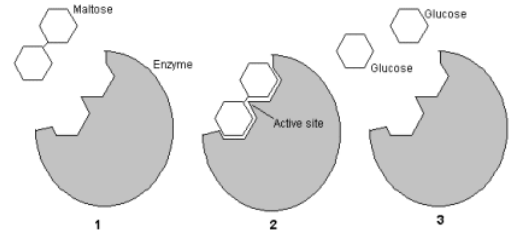


Enzymes & Cell Metabolism

Vocabulary Review



1 C O E N Z Y M E

H

2 I N D U C E D F I T

3

4 D E N A T U R E D

M

5 C

6 S U B S T R A T E

7 E

8 A C T I V A T I O N

9

10

11 E N D E R G O N I

12 C

L

H

13 A T P

14 V

15 L O W E R

O

16 C

17 T R A N S P O R T

18 S P E C I F I C

19 P

20 T E M P E R A T U R E

21

22

23 A S E

H

24 M E T A B O L I S M

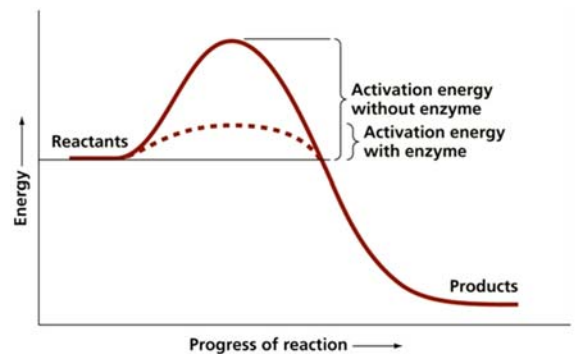
25 A R S E N I C

26 E N E R G Y

27 M E C H A N I C A L

C

EclipseCrossword.com



Across

1. **COENZYME**—The organic, nonprotein molecules (e.g. vitamins) that assist the enzyme and may even accept or contribute atoms to the reactions.
2. **INDUCEDFIT**—Model that states that the active site of an enzyme changes shape slightly when bonded to substrate.
4. **DENATURED**—When an enzymes shape changes and it can no longer perform its function, it is referred to as being _____.
6. **SUBSTRATE**—The name for the reactants in an enzymatic reaction.
8. **ACTIVATION**—The energy of _____ is the energy that must be added to cause molecules to react with one another.
11. **ENDERGONIC**—Type of reaction that requires an input of energy.
13. **ATP**—Abbreviation for the common energy currency of cells.
15. **LOWER**—Enzymes function to (raise/lower) the energy of activation for a reaction.
17. **TRANSPORT**—In this type of work, ATP supplies energy needed to pump substances across the plasma membrane.
18. **SPECIFIC**—Enzymes are highly _____ as each one will drive only one biochemical reaction.
20. **TEMPERATURE**—Most enzymes have an optimal _____ to work most efficiently at, however if it gets too high or too low the enzyme will cease to function.
23. **ASE**—Three letter suffix for naming enzymes
24. **METABOLISM**—Sum of all the chemical reactions that occur in a cell.
25. **ARSENIC**—This metal acts as a non-competitive inhibitor and will cause death if exposed to it for a prolonged time.
26. **ENERGY**—Required by all organisms to carry out the processes of life.
27. **MECHANICAL**—In this type of work, ATP supplies the energy needed to permit muscles to contract, cilia and flagella to beat, etc.

Down

1. **CHEMICAL**—In this type of work, ATP supplies energy needed to synthesis macromolecules.
3. **ENZYME**—A protein that functions to speed a chemical reaction.
5. **CYANIDE**—This poison is a competitive inhibitor and will cause rapid death as it interferes with ATP production.
7. **EXERGONIC**—Type of reaction that releases energy.
9. **THYROXIN**—Produced by the thyroid gland and targets the mitochondria of most cells in the body.
10. **ACTIVESITE**—Small part of enzyme that fits together with the substrate.
12. **COFACTORS**—Inorganic ions such as copper, zinc, or iron that help enzymes function properly.
14. **VITAMINS**—Small, organic molecules that must be consumed in our foods as the body cannot produce them. Without them, the body suffers from a lack of certain enzymatic actions.
15. **LOCKANDKEY**—Model that states an enzyme and substrate fit perfectly together.
16. **COMPLEX**—When the bonded together, the enzyme and substrate form an enzyme-substrate _____.
19. **PATHWAY**—A metabolic _____ is a series of linked reactions that begin with a particular reactant and terminate with an end product.
21. **PH**—Most enzymes have a preferred _____ to work most efficiently at (e.g. pepsin likes ~2 and trypsin likes ~8).
22. **ALLOSTERIC**—The _____ site is where the coenzyme binds.