

Enzyme Review Sheet

Name :

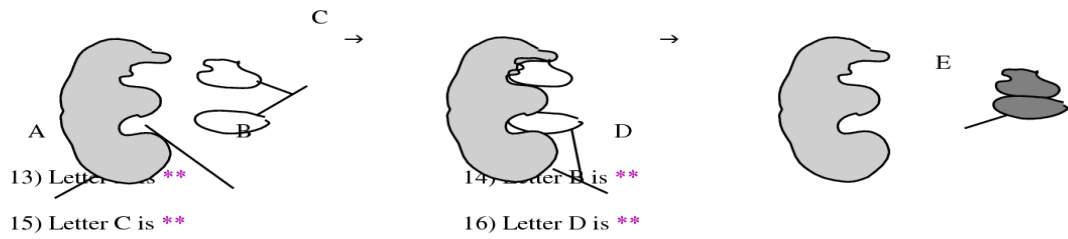
Short Answer

- 1) Why are enzymes so important to organisms- what do they do for the organism? **
- 2) Do you think an enzyme, that is use to a pH of 10, would work properly in a pH of 2? Why? **
- 3) Do you think an enzyme that is used to a temperature of 35°C would work in an environment with a temperature of 90°C? Why? **

Identify: Write an "E" for enzyme if the characteristic describes an enzyme or "N" for non enzyme if it is NOT an enzyme characteristic.

- | | | |
|-------------------------------------|-------------------|-----------------------------|
| 4) ** can be used again & again | 5) ** catalase | 6) ** can only be used ONCE |
| 7) ** only works with one substrate | 8) ** bleach | 9) ** speeds up reactions |
| 10) ** works with any substrate | 11) ** a catalyst | 12) ** hydrochloric acid |

Labeling: In the diagram below, label the substrate, enzyme, active site, substrate-enzyme complex and the product.



- 13) Letter A is **
- 14) Letter B is **
- 15) Letter C is **
- 16) Letter D is **
- 17) Letter E is **
- 18) Is this enzyme breaking apart or putting together the substrate? **
- 19) How do you know that letter A is an enzyme? What characteristic of an enzyme is shown in the diagram?

Fill in the blank

- 20) The substrate must fit perfectly with an enzyme's **.
- 21) The way an enzyme fits with a substrate is known as the ** and key fit.
- 22) Will a reaction occur if the enzyme's active site is damaged? Why? **
- 23) How do you think an enzyme's active site can become damaged? **