

**Enzyme Review Sheet**

**Name :**

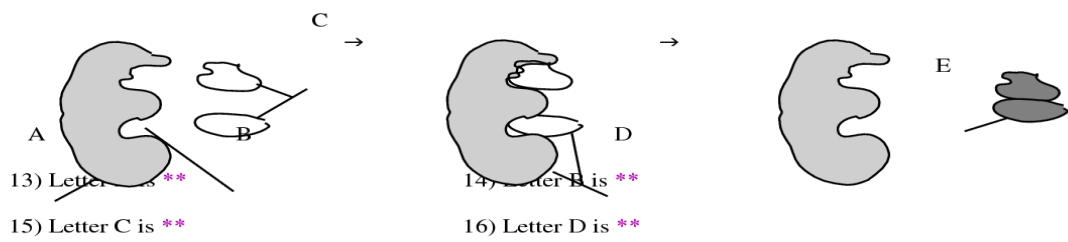
**Short Answer**

- 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? \*\*

