

## Enzyme Worksheet

1. Match the following words with their definitions.

\_\_\_\_\_ Product

\_\_\_\_\_ Active site

\_\_\_\_\_ Enzymes

\_\_\_\_\_ Catalyst

\_\_\_\_\_ Substrate

\_\_\_\_\_ Activation energy

a. Amount of energy required for a chemical reaction to occur.

b. Substances that bring about a chemical reaction without being changed itself.

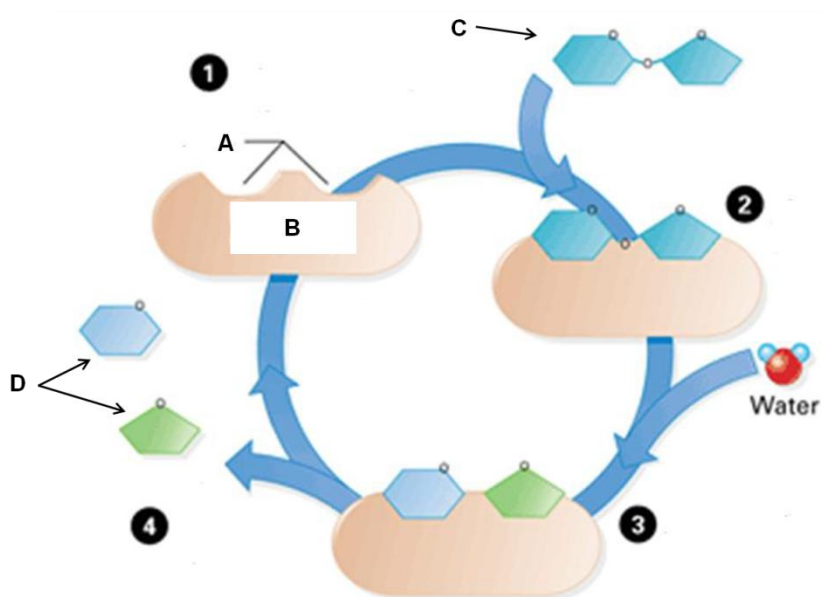
c. Substance that enzymes act upon.

d. Regions on the surface of enzymes that fit the substrate.

e. Substance formed from the substrate at the end of a chemical reaction with an enzyme.

f. Proteins that speed up chemical reactions.

2. In the tables below, label the letters on the diagram using the terms substrate, products, enzyme, and active site. Then, provide descriptions for what is happening in steps 1-4 in the diagram.



Labels	
A	
B	
C	
D	

Descriptions	
1	
2	
3	
4	

## Answers

1. e  
d  
f  
b  
c  
a

2.

Labels	
A	active site
B	enzyme
C	substrate
D	products

Descriptions	
1	enzyme enters the reaction
2	substrate binds to the active site of the enzyme
3	the substrate is converted into products
4	the products are released from the enzyme so that the cycle can start again