

Enzyme Review Worksheet

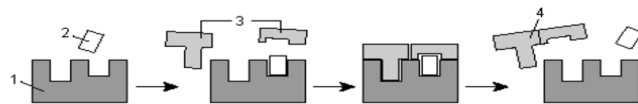
Part A: Define the following terms in your own word. Be clear and concise!

metabolism	
substrate	
enzyme	
active site	
coenzyme	
metabolic pathway	
activation energy	

Part B: Short Answers

- The equation $ADP + P_i \rightarrow ATP$ is energy (*requiring or releasing*) _____.
- In the pathway below, the letters stand for _____ and the numbers stand for _____. Each and every reaction in a cell requires a specific _____.

$$A \xrightarrow{1} B \xrightarrow{2} C \xrightarrow{3} D \xrightarrow{4} E$$
- If an enzymatic reaction is heated *gently*, it will _____.
- Enzymes _____ the amount of activation energy necessary for a reaction to take place by putting its substrates on a precise "collision course."
- In the equation $S + E \rightarrow SE \rightarrow P + E$, what do the letters stand for?
 S: _____ P: _____
 SE: _____ E: _____
- Name two environmental factors that can change the shape of an enzyme.
 i. _____ ii. _____
- Name two factors that can speed up enzymatic reactions
 i. _____ ii. _____
- Enzymes have helpers called _____. A common example of the latter is NAD. What is the function of NAD in cells? _____.
- Label the parts on this diagram.



1	
2	