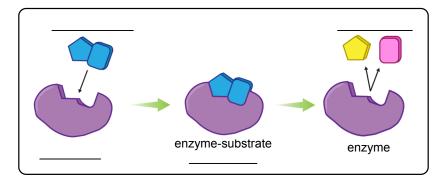
## **CONCEPT: INTRO TO ENZYMES**

- Enzymes: \_\_\_\_\_ or non-protein molecules, act as catalysts by \_\_\_\_\_ up rates of biochemical reactions.
  - □ They do so by lowering the \_\_\_\_\_ energy (E<sub>a</sub>) of a reaction.
    - **Recall:** Activation Energy is the \_\_\_\_\_ energy required for a reaction to occur.
    - Enzymes themselves are altered or consumed in the reaction.



- Substrate: a \_\_\_\_\_\_ which binds with enzyme; much \_\_\_\_\_ than the enzyme.
  - ☐ Transforms into product(s).

**EXAMPLE:** Which of the following in correct about enzymes?

- a) Enzymes are capable of speeding up biochemical reactions.
- b) Enzymes are consumed in the biochemical reactions they catalyze.
- c) Enzymes speed up biochemical reactions by increasing the activation energy of the reaction.
- d) Enzymes are molecules that are transformed into products, while substrates facilitate the reactions.