1.9 Enzymes

Enzymes are specific types of proteins made from strings of amino acids. The function of the enzyme is determined via the sequence of amino acids, types of amino acids, and the shape of the string. They act as catalysts to help produce and speed up chemical reactions. When a cell needs a task done, it uses an enzyme (strings of amino acids) to speed things up, since they can be re-used.

Enzymes have a specific pocket on their surface known as an active site. The molecule (two atoms joined together) that they react with fits right into that pocket. The molecule or substance that the enzyme reacts with is known as the substrate. The reaction occurs between the enzyme and the substrate at the active site. After the reaction is complete, the new molecule (two atoms joined together) or substance is released by the enzyme. This new substance is known as the product. The enzyme (strings of amino acids) operation is shown in the Fig. 2 below:

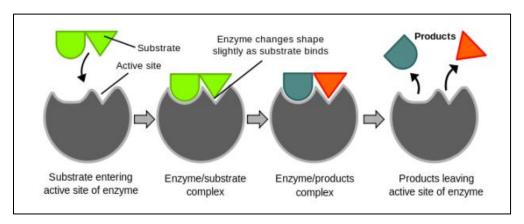


Fig. 2

1.10 Self-Check Questions for the Enzymes Sub-Section

- 1. What are enzymes?
- 2. What do enzymes do?
- 3. What is the result when enzymes react with a molecule?