



Mr. Silluzio
Biology Lesson Plan
Date:

Topic: Chemistry of Life: Biological Molecules with focus on Enzyme Structure and Function

Summary: This lab activity is modified from the peroxidase enzyme lab implemented in AP Biology and Biomed. Students are given directions to prepare reaction tubes with specific and varying concentrations of enzyme and the enzymes substrate. Spectrophotometers are used to detect color change, which occurs in response to enzyme catalysis.

Goals/Objectives:

- Understand proteins as three dimensional molecules whose structure is specific to its function.
- Understand that enzymes are a class of proteins that have specific regions responsible for catalyzing chemical reactions.
- Key terms: Active site, substrate, induced fit model, competitive and noncompetitive inhibitor.

Standards:

[Corresponding Curriculum](#)

Time Required:

2 80 minute periods (time distributed over several periods)

Homework: Read chapters 2 and 3 Campbell and Key terms vocabulary. Some students may need to complete the lab at home.

Prerequisite Knowledge:

Understanding of protein structure (basic) and covalent bonding.

Accommodations:

Notes, resources and enrichment material are available on a class webpage.