

Enzyme Function Lab

Goal 1.0 Skills and Processes

- 1.4.1 The student will organize data appropriately using techniques such as tables, graphs, and webs. (for graphs: axes labeled with appropriate quantities, appropriate units on axes, axes labeled with appropriate intervals, independent and dependent variables on correct axes, appropriate title.)*
- 1.1.5 The student will explain factors that produced biased data (incomplete data, using data inappropriately, conflicts of interest, etc.).
- 1.2.1 The student will identify meaningful, answerable scientific questions.
- 1.2.6 The student will identify appropriate methods for conducting an investigation (independent and dependant variables, proper controls, repeat trials, appropriate sample size, etc.).
- 1.2.7 The student will use relationships discovered in the lab to explain phenomena observed outside the laboratory.
- 1.3.1 The student will develop and demonstrate skills in using lab and field equipment to perform investigative techniques^{NTB}.
- 1.3.2 The student will recognize safe laboratory procedures.
- 1.3.3 The student will demonstrate safe handling of the chemicals and materials of science^{NTB}. **
- 1.3.4 The student will learn the use of new instruments and equipment by following instructions in a manual or from oral direction^{NTB}.
- 1.4.2 The student will analyze data to make predictions, decisions, or draw conclusions.
- 1.4.6 The student will describe trends revealed by data.

1.5.1 The student will demonstrate the ability to summarize data (measurements/observations).

1.7.5 Students will investigate career possibilities in the various areas of science.

Goal 3.0 Concepts of Biology

3.1.2 *Discuss factors involved in the regulation of chemical activity as part of a homeostatic mechanism. (enzyme regulation) **

3.1 The student will carry out scientific investigations effectively and employ the instruments, systems of measurement, and materials of science appropriately.

3.1.1 The students will be able to describe the unique characteristics of chemical substances and macromolecules utilized by living systems (specifically enzymes).

* Italicized CLG's are the primary focus of the laboratory activity.