Lab Report Rubric　　　　　　　　　Name_____ Period: _____　Class: Pre-AP BIOLOGY LAB: ENZYMES

A proficient lab report must:
1. Demonstrate that the student understands the nature of science and the scientific process
2. Demonstrate that the student understands the applicable TEK's and other content and concepts presented and analyzed in the experiment.
3. Demonstrate the student's ability to analyze their data and use their data to draw conclusions relative to the validity of their hypothesis.

CATEGORY	Exceeds Standard (3 points)	Meets Standard (2 points)	Approaching Standard (1 point)	Below Standard (0 points)	Points	Wt.	Total Pts.
Title	The title is clear and states the variables of interest, the parameters, and the organism	The title is clear and states the variables of interest and/or the parameters or the organism	Title is vague	No title		1	
Question & Purpose	Insight included in the purpose or question. Is in the students own words.	The purpose of the lab or the question to be answered during the lab is clearly identified and stated.	The purpose of the lab or the question to be answered during the lab is identified, but is stated in a somewhat unclear manner.	The purpose of the lab or the question to be answered during the lab is erroneous.		1	
Hypothesis	Format is correct. Hypothesis is testable. Hypothesized relationship between the variables and the predicted results is clear & insightful.	Format is correct Hypothesis is testable. Hypothesized relationship between the variables and the predicted results is reasonable.	Format is evident, but may contain mistakes. Hypothesized relationship between the variables and the predicted results has some errors.	Format not evident Hypothesis is totally incorrect.		1	
Materials & Procedures	Materials list is complete. Description of procedure is clear, numbered, and in sequenced steps. Procedure is written so that the experiment could be easily repeated.	Listing of materials almost complete. Description of procedure is clear. Procedure is written so that the experiment could be repeated.	Some materials missing Description somewhat unclear. Would be difficult to repeat.	Many materials missing Description very unclear. Could not be repeated.		2	
(Results) Data and Observations	Accurate representation of the tabular data and observations. Tables are, numbered, labeled and titled. Correct units. Observations only – NO interpretation.	Data and observations are complete, but include occasional errors. Observations only – NO interpretation.	Data and observations are incomplete and inaccurate. Table format is evident, but some units are missing. Some interpretation of data.	Data and observations are completely inaccurate, incomplete and poorly organized. Extensive interpretation of data.		2	
(Results) Graphs	Type of graph is appropriate for the application. Variables are plotted on the correct axis. Units are correctly plotted and scaled Graph includes figure number, title, axis labels and units.	80 % of criteria are completed	60% of criteria completed.	40% of criteria completed.		3	
Conclusion/ Data Analysis	Student effectively follows the RAISE method for data analysis. Student correctly identifies trends and is able to draw suitable accurate conclusions from the data in a clear and concise manner. Student recognizes errors and inaccuracies in the processed, manipulated, and presented data and their analysis. Student is able to relate presented data to other knowledge.	Student follows the RAISE method for data analysis. Student identifies trends and is able to draw conclusions from the data. There are a few inaccuracies in the data analysis. Student can recognize some errors and inaccuracies in the processed, manipulated, and presented data and their analysis. Student is able to make some links to other knowledge.	Student meets some but not all of the requirements of data analysis using the RAISE method. Student attempts to identify trends to draw conclusions from the data. There are several inaccuracies in data analysis. Students attempt to make some links to prior knowledge.	Student does not follow the RAISE method for data analysis. Student makes no attempt to analyze data or draw conclusions. The analysis of data is fundamentally flawed. Student makes no attempt to link prior knowledge.		3	
Conclusion	Meets the standard with exceptional insight and analysis. Exemplary understanding of the applicable TEK's	Sources of error identified Discusses applications and or extensions of experiment Adequate understanding of the applicable TEK's.	One of the "meets standards" condition has not been met. Emerging understanding of applicable TEK's	Two or more of the "meets standards" condition has not been met No understanding of the applicable TEK's		2	
Format	Accurate and complete format. Well-written. Avoids personal pronouns. Excellent citations in correct format.	Accurate and complete format. Adequately written. A few grammar or spelling mistakes. Adequate citations in correct format.	Format incomplete. Poorly written Citations included	Format incomplete and difficult to follow. Very poorly written. No citations		1	
				Total Points Earned =		/48	