

AP Biology Formal Lab Report Guidelines

Prepare a written report of your experiment which includes the section titles listed below. These section titles should be used to label each section of your report.

- I. Title*
- II. Introduction*
- III. Materials and Procedures*
- IV. Results/Data Collection/Analysis*
- V. Discussion/Conclusion*
- VI. Literature Citation*
- VII. Questions*

The following information should be included in each section of the lab report.

- I. **Title** - Be as specific as possible and briefly denote primary topic dealt with during the experimentation. The title should be written in the appropriate box provided on the lab book formatted page.
- II. **Introduction** - In this section of the report you should include the following pieces of information:
 - a. Background information that will help them understand the experiment that you have conducted. Important terms should be defined in the section.
 - b. Purpose of the lab and should be clearly stated in the introduction.
 - c. Hypothesis – a testable hypothesis should be included, written in an if-then format.
- III. **Materials & Procedures** - A complete listing of the materials and supplies that were used to conduct the experiment should be included in this portion of the report. In this section of the report you should present the exact steps that were followed in your experiment. Clearly identify the control, variables and the measurement techniques used.
- IV. **Results/Data Collection/Analysis** - All of the data that was collected during the experiment should be presented in a data table or tables. Additionally, a graph of the data should be included in this section. Make sure that the graph is appropriately titled and axes labeled. Include a legend if necessary.
- V. **Discussion/Conclusions** - This portion of the report is used to clearly explain whether the results support or refute the hypothesis being tested. Explain what your findings mean and what conclusions you can draw from the data. Sources of error and suggestions for improvement should be included in this section.
- VI. **Literature Citation** – Given that some of the information included in your lab write up will have been taken from a published lab activity, you should include a citation of the source. The source(s) used should be cited within your lab write-up (especially in the introduction section) using scientific citation. Example: (College Board, 2001).

The following citation format will be appropriate for lab reports based on one of the 12 AP Biology labs:

Lab # ____ Title of Lab (College Board, 2001)
AP® Biology Lab Manual for Students (2001) New Jersey: College Board. p. ____-____.

- VII. **Questions** – The discussion questions found throughout the laboratory should be *written and answered* in this section.

REPORT ITEM	POSSIBLE POINTS	EARNED POINTS/comments
Title	3	
Introduction	(12)	
Background information	4	
Purpose of the experiment	4	
Hypothesis	4	
Materials and Procedures	(15)	
Materials listed	5	
Procedures stated	5	
Control(s) identified	5	
Results/Data Collection/Analysis	(20)	
Data recorded in tables	8	
Graph(s) present	6	
Titled	2	
Axes Labeled	2	
Variables correctly identified	2	
Conclusion	(12)	
Summarizes results	4	
Errors identified	4	
Conclusion stated	4	
Improvements recommended	4	
Literature Citation	(4)	
Cited within write up	2	
Citation information correct	2	
Questions	(34)	
Questions written	10	
Correctness	24	
Comments		
TOTAL POINTS	(100)	