

Name _____ Date _____ Period _____

AP BIOLOGY – LAB REPORT RUBRIC

TITLE:

_____ / 1 The purpose of the investigation is concisely stated.

ABSTRACT:

_____ / 2 A summary of the investigation is written in 100 words or less.

INTRODUCTION:

_____ / 2 The background information is relevant to the lab and is clearly explained.

_____ / 1 The purpose, objective, or primary question of the lab is clearly stated.

_____ / 2 The hypothesis(es) is/are clearly stated in “if, then” format and make(s) a reasonable prediction.

EXPERIMENTAL DESIGN:

_____ / 2 The materials and equipment used in the lab are clearly listed.

_____ / 2 The procedure for the lab is explained. Be specific but brief. Include labeled diagrams if necessary.

_____ / 2 The control group, independent variable, dependent variable, and constants are clearly identified.

RESULTS:

_____ / 5 The qualitative and/or quantitative observations are included. When relevant, all necessary calculations are included.

_____ / 2 Data is displayed in the appropriate formats, such as charts, graphs, data tables, diagrams, etc. Correct labels are included (titles, axes, column headings, etc.)

DISCUSSION:

_____ / 5 The lab results are clearly explained using CLAIM-EVIDENCE-REASONING.

_____ / 3 The explanation specifically refers to data.

_____ / 3 The explanation specifically refers to the hypothesis and primary question.

_____ / 3 The explanation discusses any problems and/or possible sources of error.

CONCLUSION:

_____ / 2 The main points of the lab are summarized.

_____ / 2 Two or more ways to improve or modify the lab are described.

_____ / 4 Based on the results of the lab, two or more questions for further investigation are proposed. A hypothesis for each question is included.

POST-LAB QUESTIONS:

_____ / 4 The post-lab questions are correctly answered, referencing data from the lab.

APPEARANCE:

_____ / 1 The lab report is typed: 12 point font, single-spaced, 1” margins.

_____ / 1 The lab report is free of spelling/grammatical/punctuation errors.

_____ / 1 The lab report has a title page which lists the following information:
title of lab, your name, name(s) of your lab partners, date.

**TOTAL
POINTS EARNED:**

_____ / 50

Title of Lab

Author: Your Name

Lab Partner: Lab Partner(s)

Date of Lab: Date the Lab Was Performed

Course: AP Biology Period _____

Title of Lab

Author's Name

ABSTRACT:

An abstract is a summary of the investigation, including the purpose and the main results from the lab. It must be written in 100 words or less. Sometimes it is helpful to write the abstract after writing the rest of the lab report. The purpose of writing an abstract is to provide the reader with a “quick glance” of the lab report.

BACKGROUND INFORMATION:

The background information is three or more paragraphs of relevant information that the reader should know in order to understand the purpose, procedure, and results of the lab. Background information can be researched from a variety of sources, including the lab handout, textbook, online sources, or even books from the library. Do not plagiarize from the lab handout or from other sources.

PRIMARY QUESTION:

The primary question is similar to the “purpose” of the lab, except that it must be written in question form. Write the primary question in a way that it is broad enough to account for everything studied in the lab, yet it is specific enough to provide the reader with a clear understanding of the lab’s purpose. If there is more than one primary question, rename the title **PRIMARY QUESTIONS** and write them in the form of a numbered list.

HYPOTHESIS:

The hypothesis is an educated prediction that attempts to answer the primary question. If there is more than one hypothesis, rename the title **HYPOTHESES** and write them in the form of a numbered list.

MATERIALS AND EQUIPMENT:

List the materials and equipment used in the lab. Separate the materials by numbering them one per line. Make sure to indicate the quantity of each material.

PROCEDURE:

List the exact procedure that was performed during the lab. Your procedure should be written in a way that a person unfamiliar with the lab would be able to replicate your work. List and number each step of the procedure separately.

EXPERIMENTAL DESIGN:

State the control group, independent variable, dependent variable, and constants that were used in the lab. If there were multiple parts to the lab with different controls, variables, and/or constants, then the terms need to be identified for each part. The experimental design components should be listed; do not write them in sentence form.

RESULTS:

The results from the lab are written in the appropriate format. The data can be displayed as charts, graphs, data tables, diagrams, etc. The correct labels are included. For example, all examples of results must have a title. The columns of data tables and the axes of graphs must be correctly labeled. All diagrams or pictures must be very clearly labeled and identified. If calculations and/or a statistical analysis are required, then they must be included (with work shown) in this section of the lab report.

DISCUSSION:

Explain the results of the lab in a clear and concise manner using the claim-evidence-reasoning framework. Specifically refer to the data often, but do not simply rewrite the results section in the form of an essay. The explanation must specifically state whether or not the hypothesis was correct. The explanation must also relate the results of the lab to the primary question that was written earlier. Finally, the explanation must discuss problems with the lab, possible sources of error, and ways to prevent errors.

CONCLUSION:

Summarize the main points of the investigation. Provide at least two ways in which the lab could be improved. Propose two additional primary questions for a future investigation related to this one. State your hypothesis for each of the primary questions.

POST-LAB QUESTIONS:

The post-lab questions are numbered. Both the questions and the answers are included. Quality answers will clearly reference data acquired in the lab.