

BIOLOGY LAB WRITE UP FORMAT

10% of grade is format

Note: Before writing the pre-lab, carefully read the description of the lab. For the majority of labs you will have a handout that contains background information and procedures for completing the lab. Read all of the information provided – do not skim. In fact, you may need to read the handout more than once to get a good grasp of what will need to be done to complete the lab.

Note: No personal pronouns (I, we, us, me, mine, you, your...) may be used while writing any part of the lab write-up.

TITLE: Write a title that captures what is important about the lab.

PURPOSE: Briefly describe what you are being asked to do in the lab (the objectives) and how it will help you learn about the scientific concept(s) described in the chapter being studied. In other words, show the link between what you will do in the lab to what you are supposed to be learning about by doing the lab.

HYPOTHESIS: May not always apply. State the hypothesis (estimated guess regarding the final outcome of the experiment). It may include the relationship or interaction among the variables. The hypothesis should be stated in 1-2 sentences using the “If...then...” format.

MATERIALS: The materials used in this experiment were:

- 1.
- 2.

PROCEDURES: The procedures used in this experiment were:

1. *10% of grade.*
- 2.

At times procedures will not be provided and you will need to write them. In this case remember to use your lab manual, handouts, and notes taken during class to use as a guide to help form the experimental procedures needed to conduct the lab. Be sure to include enough details about the materials and methods so that if I asked you to pass them to another lab group they would be able to repeat your procedures without asking you any questions.

DATA: *20% of grade. (Charts, graphs etc.)*

May not always apply. Put your lab data in visual form by creating appropriate tables, graphs, and other figures. Representing your data in a visual format will allow you to identify trends and relationships among variables more easily.

FINDINGS: *20% of grade.*

Report all results in detail utilizing charts, graphs etc. DO NOT make any interpretations/inferences. (State just the facts).

ANALYSIS: *40% of grade.*

Review all your data and discuss its meaning (i.e. interpret the data). Provide reasons for the results. Also focus on significant findings and what they mean. *Tie in information from text, class notes, discussion and outside sources that apply to lab.* If there is analysis questions associated with the lab handout use the responses to these questions within the body of this section where appropriate. (Do not type the questions and answer them, and consider the analysis and conclusion section completed. If this is how you hand in this section I will not accept your lab write-up).

What patterns do you see in the data?
How do you interpret the data? What evidence supports your interpretation?
What might be inaccurate about your interpretation?
How else can you explain the data? List two alternative explanations.
How can you organize the data to present the strongest explanation for your conclusion?

CONCLUSION:

Explain how your findings connect with the “real” world. Where can such findings be found? What do these findings mean (their impact in the “real” world? What conclusions can you draw from your analysis?

In this section identify the scientific concept(s) (principle, theory, law) summarizing what you have learned about the scientific concept(s) from doing the lab. Back up your statements with details from the lab experience. Explain your hypothesis using the scientific concept of the lab to show the reasoning behind your prediction. In a following paragraph (if applicable), *summarize* the finding in each of your visuals – tables, graphs, or other figures. First state the overall relationship or interaction among variables that each visual represents, then include any specific details from the visual that are important for understanding the results. Overall – what did you learn, were there any errors, how does this lab apply to concepts taught in class and last link these concepts to real world applications.

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Lab Reports are DUE 2 WEEKS FROM THE DAY OF LAB COMPLETION. ALL lab reports MUST BE TYPED. A SUBMITTED REPORT IN THE INCORRECT FORMAT OR MESSY WILL BE RETURNED FOR STUDENT TO REDO AND WILL BE CONSIDERED LATE. THE LAB REPORT GRADE WILL BE DROPPED ONE FULL GRADE EACH DAY IT IS LATE. *Handwritten reports will not be accepted.*

Lab Format: 1” margins, 12 font, double-spaced (findings, analysis, and conclusion). Refer to sample lab write-ups on board.