

Bio 101

Lab report directions

D. Anderson

Lab reports must be typed. Graphs should be drawn by hand, but you must draw the graph on graph paper (not plain or lined paper). If you worked with a partner, turn in one paper that represents the work of both people on each section – do not have one person do half, and the other person do the other half and then just staple them together!!

Lab Report sections:

I. Introduction:

- a. Introduce the context (ecosystems, enzymes, whatever you are studying...).
- b. State the purpose of doing the experiment. Briefly discuss the process or structure that the experiment involves.
- c. Clearly state the If...and...then...for your study.
 - i. State why you think that your hypothesis, your “IF”, is correct.
 - ii. You must include a specific prediction as your “then”; don’t just say that something “will vary”.

II. Procedure:

- a. Describe how you set up the experiment and collected your data in sufficient detail so that someone else could replicate your study. Include all of the materials/supplies that you used.
- b. Identify the independent, dependent and controlled variables.

III. Results:

- a. Provide a table of your results.
- b. Provide a graph of your results on graph paper. Make sure that your graph has a descriptive title, that the axes are labeled, and that the scales are done correctly.
- c. Summarize your results in a paragraph, but do not draw any conclusions.

IV. Conclusions:

- a. State whether your hypothesis was supported or rejected by restating your If/And/Then and adding And (or But)/ Therefore/Because.
 - “And” – Describe any results that matched your prediction
 - OR “But” – Describe any results that did not match your prediction
 - “Therefore” – State whether your hypothesis was supported or rejected
 - “Because” – This is where you justify HOW these results support or reject hypothesis.
- b. State any problems that you had in your study, as well as what you could have done differently to avoid the problem. If you did not have problems, describe which type of study could be done next to study this situation.