**Your Name**

**Date**

**Lab Partner’s Name**

**Biology**

**Lab Report Format**

 **Biology**

**Lab Title**

**Purpose:** The purpose of this lab is….(Include the IV and the DV when necessary. For example: “The purpose of this lab is to see how the length of the spring is effected by the amount of weight added”.)

**Introduction:** This area is to explain what you know about the scientific concepts behind the purpose. Cover enough info so that the teacher knows you understand the concepts. Information from class notes, previous knowledge as well as outside sources should be used . Include techniques used (ie, sexing fruit flies) and any chemical formulas (if there are any). The introduction should be one to two paragraphs long.

**Hypothesis:** This should be written in “If/ Then/ Because” statement. The “because” should be backed up by the theory, law or concept that led you to your hypothesis.

**Materials:** List all materials required for the lab. BULLET your list!

**Procedure:** List all steps required to repeat the experiment. NUMBER your steps, DO NOT WRITE IN PARAGRAPH FORM!

**Data/ Results:**

Include all data in data tables.

Include a graph(s) when possible.

Do not interpret your data just present the facts.

**Sources of Error:** Discuss what might have gone wrong in your experiment. Ex: Procedures not followed correctly, procedures altered or measurement errors.

**Conclusion:**

* Start by summarizing your results. This can be done by using a Statement of Relationship Format: As the (IV) \_\_\_\_\_\_\_\_\_\_\_\_\_the (DV)\_\_\_\_\_\_\_\_\_\_\_\_ as evidenced by my data which shows\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (Summarize your data here. This does not need to include ALL data points, but should be a look at the overall trend of the data).
* If you have more than one hypothesis, include a statement of relationship for each one.
* Then, go back to your original hypothesis, and describe whether you were right or wrong. Cite Data that shows if you were right or wrong. Remember, you are not proving or disproving, or accepting and rejecting. You are simply stating if your hypothesis was supported or not.
* The experiment is all about testing a hypothesis. It does not matter if it is right or wrong.
* In the next paragraph, explain the science behind your data. Explain why the results did or did not support your hypothesis.
* If your understanding of the subject material has changed since you formed your hypotheses, include how and why in this paragraph. These guidelines were taken from the LabWrite program:
	+ Return to the scientific reasoning you used to generate your hypothesis (at the end of the Introduction). Use it and your understanding of the scientific concept of the lab as starting points for your explanation. Your explanation is likely to follow one of four scenarios. Choose the one that best fits your report:
	+ If the results fully support your hypothesis and your reasoning in the Introduction were basically sound, then elaborate on your reasoning by showing how the science behind the experiment provides an explanation for the results.
	+ If the results fully support your hypothesis but your reasoning in Introduction was not completely sound, then explain why the initial reasoning was not correct and provide a better reasoning.
	+ If the results generally support the hypothesis but in a limited way, then describe those limitations (if you have not already done so) and use your reasoning as a basis for discussing why those limitations exist.
	+ If the results do not support your hypothesis, then explain why not; consider (1) problems with your understanding of the lab's scientific concept; (2) problems with your reasoning, and/or (3) problems with the laboratory procedure itself (if there are problems of reliability with the lab data or if you made any changes in the lab procedure, discuss these in detail, showing specifically how they could have affected the results and how the uncertainties could have been eliminated).

**References:** Include any resources you used. Please use MLA format. Your word processing program has a bibliography tool. It’s very cool, check it out!

# Bibliography

North Carolina State Univesity. SECTION FOUR : Discussion Interpreting the results of the lab. 16 May 2005. Retrieved: 22 July 2014 <http://www.ncsu.edu/labwrite/po/po-discuss-2.htm>.