# **Honors Biology Lab Report**

#### Title:

Short and precise; should accurately depict experiment done.

# **Purpose:**

Give a rational explanation as to why you are conducting the experiment

# **Hypothesis:**

State your hypothesis. This should be an educated guess as to what you believe your investigation will show. It should include the independent variable and the dependent variable.

# **Material and Equipment Used**

Provide a concise list of materials that are required to perform the experiment, type of plant, etc

#### **Procedure**

Give a detailed, step-by-step, description of how this experiment was conducted. Another scientist should be able to perform your lab using your method. Do not leave anything out. This is not a paragraph, but rather a numbered list.

#### **Date collected**

- Data table (Produce a labeled table of your results, including units of measurements)
- Calculations show any calculations that you used in the interpretation of your data
- Graphs provide any labeled with units, suitably scaled graphs to help with the data you collected

# **Data Analysis**

- Summary data trends give an explanation of the observations, trends/links in the results (eg: how did the IV affect the DV)
- Explain how errors could have occurred during the experiment and what steps could be taken to minimize their effects. If necessary, provide a statistical analysis of the accuracy of your data.

#### **Conclusion**

Briefly describe the experiment. Give a full explanation of the outcome of your experiment, noting if the purpose was fulfilled using this procedure. Was your hypothesis validated – why or why not? Explain concisely what you achieved by performing this experiment.