Title: ____________________________________________________________

Group (Name and members): ________________________________________

INTRODUCTION
In a few sentences, give some background on this project. For example, tell us the following.
1. What biological system are you investigating?

2. Are you using a model organism? If so, why is it appropriate for your study?

3. What critical question are you asking about this biological system?

4. Is a pilot study necessary to verify that there is a basis for this question? If so, briefly describe such a pilot study and what it is intended to show.

5. What parameter are you going to measure in this study? Why is it appropriate?

6. What is your overall hypothesis regarding the system you are examining?

7. If you are using statistics to examine your system, what is your null hypothesis?

8. What is your alternative hypothesis?
9. What do you predict your results will show? Why?

METHODS
In a few sentences, tell the reader what you did and how to do it.
1. What are you measuring? Are there treatment and control groups? Are you comparing two different sub-systems within your biological system? Describe them and explain what you are measuring.

2. Describe your experimental procedure. (Give all details, such as temperature, equipment used to take measurements, etc. Another person should be able to replicate your work by reading this and following the general directions.)

3. What type of statistical test will you use to analyze your data?

RESULTS
In a few sentences, tell us what you observed in your experiment.
1. What are the statistics of your treatment & control groups (as appropriate; e.g. means of weight, length how many days it took to go from stage X to stage Y, or whatever you measured.)

2. What were the results of your statistical test?
   Value of your statistic:
P value:

3. Did your statistical test indicate that you should accept or reject your null hypothesis?
4. Arrange your analyzed data in neat, tabular or figure form. In the space below, write a legend for the table or figure, telling the reader exactly what is shown. Don't forget the units you used to measure your data (weight in grams; number of days, etc.)

DISCUSSION
In a few sentences, explain your findings. This is the most important part of your paper!

1. Which hypothesis did you (provisionally) accept?

2. How does the above correspond (or not correspond) your predictions?

3. What, exactly, do your data tell you?

4. To the best of your ability, using logic and creative reasoning—Pose as many competing hypotheses that could explain your results as possible. These should be stated so as to provide testable hypotheses for additional experiments.

5. What future experiments could be done to further shed light on what this experiment told you about your biological system?

6. Give a summary statement that draws the entire study together.