**Bacteria Lab Report Guidelines**

Final Due Date: **May 19th**

If you would like teacher edits, a draft of your paper must be received **no later than May 12th**

**DESCRIPTIVE TITLE (1pt)**:

* The title describes the topic of the experiment.

**INTRODUCTION (7pts):**

* Provides background information and explains the relevance of your experiment. Informs about other similar studies and the results.
  + \*In other words, tells why the experiment is important.
  + \*Cite your sources using APA format (one that gives the author in the text) *Need to have at least 2 sources*
* Explains the purpose of your experiment.
* Explains your question and hypothesis.

**MATERIALS and METHODS (4 pts):**

* What did you use?
* How much/many did you use?
* Explains the procedure used. If you borrowed a procedure from another cite the study.
* Another person should be able to read this and perform the same experiment.

**DATA/RESULTS (5 pts):**

* Appropriate statistical analysis and *a written explanation of the statistics* (any statistical results are stated).
* Include observations, data tables, graphs, and other figures that pertain to your experiment. Refer to these in the written explanation. Include the page number of the figure if it is not on the same page. All figures should have a descriptive title.
* Label the units and make the data as easy to interpret.
* DO NOT INCLUDE RAW DATA

**CONCLUSION/DISCUSSION (7 pts):**

* Interpretation of your results. What do they mean? How do they fit into what you know about biology (hint: include something about evolution and natural selection)?
* Did your results support your hypothesis? Explain why or why not.
* What improvements, if any, could be made to your experimental design?
* Given the results of your experiment, what would be the next experiment to conduct?

**REFERENCES (2 pts):**

* Use APA style. Make sure to include in-text citations.
  + Example: *In text*

Previous experiments show the increase in antibiotic resistant bacteria (Tadesse, et al., 2012).

* + Example: *In Reference Section*

Tadesse DA, Zhao S, Tong E, Ayers S, Singh A, Bartholomew MJ, et al. *Antimicrobial Drug Resistance in Escherichia coli from Humans and Food Animals*. Center for Disease Control and Prevention, May 2012. Research Paper (Web). May 4, 2014.

**COMMUNICATION (4pts):**

* Paper is well organized, logically flows, well written few grammar, spelling and punctuation mistakes
* Headings for each section are included.