**Proposal for Independent Research Project – Biology II Honor**

Each student (or with a partner) will spend the forth quarter carrying out an independent inquiry project of their own design. Ultimately you will share your final project with the class in the form of a formal lab report or a detailed presentation. Before you begin you must submit a proposal and the proposal must be approved. The time and effort you put into your proposal will help your experiment progress smoothly and will help with the completion of your final product.

I will be looking at the proposal to see if…

* The idea is feasible
* You can carry out the project in less than five weeks
* The subject is well defined and narrow enough for meaningful experimentation
* You have submitted all parts of the proposal.

Submission options

* Submit a google doc that is clearly titled with your name(s) and includes headings for each of the proposal sections (preferred method)
* Submit a hardcopy

Your proposal must include the following…

1. **Testable Question and Experimental Rational**
   1. Record the question in one or two sentences
   2. Explain why your question is significant.
   3. Describe what you already know about the topic.
2. **Hypothesis**
   1. What is your independent variable
   2. What is (are) your dependent variable(s)?
   3. Restate your testable question in the following format. If (the independent variable) affects the (dependent variable), the (specific prediction).
3. **Preliminary Research**
   1. Annotated Bibliography with your early research on your topic. 3 sources.
4. **Equipment Requirements**
   1. What unique materials do you require?
   2. Do you need me to order you any organisms/seeds?
   3. Does your experiment require you to design an apparatus of any kind? What are your plans?
5. **Experiment Outline and Timeline (this should be the longest and most detailed section)**
   1. Specific overview of what steps you will take
   2. Relevant procedures that limit experimental error
   3. Data collection plan and timeline.
   4. Materials list
   5. Week-by-week plan