

Name: _____ Date: _____ Block: _____

Inquiry Project (Science 9 Pathways)

Goal: To immerse students in all parts of the scientific process, including selecting a testable question, designing an experiment, ethical considerations, carrying out the experiment, and communicating results.

Part A: Proposal

Due Date: October 22

In this proposal, you will describe your topic, your rationale for conducting this experiment, and outline your first draft of your experimental design. You will also make a list of all materials you think you will need, as well as any you will need help procuring.

Part B: Experimental Design

Due Date: _____

In this assignment, you will submit your refined experimental design, complete with materials and plans for procuring each of the materials.

Preliminary Data Collection

Recommended Deadline: _____

You will complete a trial run(s) to test out the equipment and the particulars of your experimental design. Depending on the results from this trial run, you may need to resubmit Part B with a refined experimental design.

Raw Data Collection

Recommended Deadline: _____

You will need to collect data in an organized manner, outside of class time. It is highly recommended that you design and print out data sheets to fill out during data collection, and/or record observations in a lab notebook. If in doubt, err on the side of recording too many observations rather than too few; these can easily be pared down later. Remember to record data such as the date of each trial, name(s) of the experimenters, and any other data that could possibly affect results.

Draft Results, Analysis, Conclusion

Due Date: _____

After a lesson on data analysis and how to present your data in graphical format, you will submit a draft of your results and data analysis so you can receive feedback before submitting your final research paper.

Part C: Final Research Paper

Due Date: _____

Part D: Poster Presentation

Due Date: _____