Heart Rate Lab

Objective: In this activity you will devise an investigation to examine the occurrence of a genetic trait across many people. You will come up with a question to investigate, predict a hypothesis, collect data, and then explain in detail the results you found.

Rough Draft Sections:
Background Information: This is an opening paragraph to tell people about the heart, its functions, how it beats, how important your heart is and some things that influence heart rate. Tie this paragraph into the investigation you will be exploring.

Tips for Questions and Hypothesis – Choose something that is easy to track and can be easily measured.

Question: What is it that you are trying to investigate? (ex. How much exercise influences heart rate recovery time?)

Hypothesis: What you think is going to happen? (ex. I think that the longer I exercise the longer it will take my hear t to recover.)

Teacher Approval: _____

Controlled Variables: Please list the other variables that you will need to be certain remain the same throughout the testing process. (where pulse is taken, who takes pulse, times)

Teacher Approval: _____

Materials List: Make a list of all the materials that you will use for your project.

Procedure: Write a step-by-step procedure describing how you will investigate the question you have selected. **(remember to establish a control or a baseline to where you will base everything off of.)**

Data Table: Create a data table that you will input your data into.

Graph: What will be labeled on your X axis and Y axis, what will your key include, etc.

Analysis: Write one to two paragraphs ***in your own words*** describing what your data is and what it means. What did you find out? Was it what you thought would happen? What are the relationships between the data and your question that you found? Were your results surprising, how?

Conclusion: Write at least one paragraph including the following questions: Restate your question, answer your hypothesis, list all errors or challenges you encountered, and suggest a follow up lab that you could do that would add to your information.