**Science Fair Paper Requirements:**

Your paper will be worked on in stages. I suggest you start one document that you save on a flash drive and back up on your one drive at school and your hard drive at home. Losing it will cause you to have a major life crisis and a loss of 3 months of hard work.

Below I am letting you know all of the required sections of the paper. You can go ahead and set up headings for each section if you would like to. The paper should be in 12 point font. I suggest Times New Roman.

**Title Page**: Put the name of your project first, then your name. Don’t write title page at the top!

**Problem**: This will be the big question you are trying to solve with your experiment.

**Rationale**: A brief synopsis of the background that supports your research problem and explain why this research is important and if there are any societal impacts of your research.

**Research Questions**: You must have a minimum of 3 research questions. Each research question must be answered with a paragraph (minimum of 5-6 sentences). The answers are from multiple sources. You will say things like “According to Brown, blah blah blah”. You should cite your sources.

**Hypothesis**: This needs to be testable. You should base your hypothesis on your research. It is an EDUCATED guess. You may want to write an if-then sentence.

**Variables**: List your independent variable, dependent variable, and your control group. You can also list controlled variables or constants.

**Materials**: List the materials needed to complete your experiment.

**Procedures**: Detail all procedures and experimental design including methods for data collection. Someone that has never heard of your project should be able to read your directions and repeat your project!

**Risk and Safety**: Identify any potential risks and safety precautions needed.

**Data**: Organize your data from the log book and your experiments into charts, tables, and/or graphs. Use computer-generated line graphs and the metric system when possible.

**Results**: Give a description of what your graphs and data showed – retell the data using numbers, and/or your analysis of the numbers such as the mean, median, or mode - What went right/wrong – suggestions to make things go smoother next time or other changes you think would be beneficial – How did the data vary between repeated observations? How were your results affected by uncontrolled events? What other experiments could be conducted?

**Conclusion**: You must accept or reject your hypothesis and explain why – restate the problem statement in its correct form – state what you learned as a result of this project – state your findings in relationships of one variable with the other and support this with data – do not introduce anything in the conclusion you have not already discussed

**Bibliography**: Can be MLA format. You must have a minimum of 5 sources that you actually referenced in answering your research questions. This is not just a list of URLs.