Capital Regional Science & Engineering Fair Research Plan

**Name:**

**School: Category:**

**Research Teacher:**

1. **Question or Problem that is addressed in project:**
2. **Rationale:** brief synopsis of the background that supports your research problem and explain why this research is important and if applicable, explain any societal impact of your research.
3. **Research Question/Hypothesis/Engineering Goals/Expected Outcomes.** How is this based on the rationale above?
4. **Materials List** Include all materials you will use as you complete your experiment.
5. **Detailed Procedures.**

**Independent Variable – what are you testing?**

**Dependent Variable – what are you measuring?**

Detail all procedures and experimental design including methods for data collection. Make sure to clarify which procedures were completed by the researcher and which were completed by others.

***A step-by-step list of procedures easily followed by another person not familiar with your project.***

1. **Risk and safety.** Identify any potential risks and safety precautions needed, including COVID for any face to face projects. List any and all chemicals used including disposal methods, if applicable.
2. **Data Analysis.** Describe the procedures you will use to analyze the data/results. (numerical or descriptive – quantitative vs qualitative, graphs or charts)
3. **Bibliography.** List 5 major references (e.g. science journal articles, books, internet sites) from your literature review. Please use a variety of sources. Five sources from the internet will not suffice.

* Include MSDS/SDS citation for all hazardous chemicals used in experimentation
* Use MLA format – use an online bibliography generator to help with this.
* List of possible references/resources are included in the ISEF Rules and Guidelines, pages 21-23
* In addition to the 5 major references, you included above, include these:

“ISEF Forms: Society for Science.” *Society for Science | Inform. Educate. Inspire.*, 2023, www.societyforscience.org/isef/forms/.

“Rules/FAQS.” *SSEF Florida*, ssefflorida.com/rules/.