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| Name:  | School: **Swift Creek M.S.** | Teacher: **Mr. Hanna** | Pd:  |

**Science Fair Project**

**Research Plan**

**Project Title**: Type the title of your project here. It should be concise but descriptive of your project.

**Research Question**: Type the guiding question for your project here. Make sure the question identifies both the IV and DV, asking how the IV affects the DV.

**Variables**:

 **Independent Variable**: Type your IV here. This is what you are manipulating.

 **Dependent Variable**: Type your DV here. This is what you are observing/measuring.

 **Controlled Variables**: Type your CV’s here. These are kept constant for each trial/sample.

**Rationale (Purpose)**: Type your rationale here. What are you hoping to accomplish with this project? Why is it important? Does it have any impact that reaches beyond the project itself (science or society)?

**Background Information:** Describe what you found out about your topic during your initial research. What is known about the topic? Provide at least a paragraph of information, if not more. Provide references to articles, books, websites, etc (from your bibliography below) using in-line citations.

**Hypothesis**: Type your hypothesis here. Remember this is not a prediction, but a testable explanation. Think of it as the “If…” part of your “IF 🡪 THEN” statement.

**Prediction (Expected Outcome):** Type your prediction here. This is the result you would expect if your hypothesis is correct. Think of it as the “…Then…” part of your “IF 🡪 THEN” statement.

**Materials List**: Type your materials here. They can be bullet-pointed, but be specific (how much/how many, what kind, etc…)

**Procedures**: Type your procedures here. They should be detailed, step-by-step instructions that you will follow to collect your data. Someone else should be able to replicate your investigation by reading your procedure. Note: Your procedures must be written in PRESENT or FUTURE TENSE (ie: “Measure …” or “I will measure…”), not past tense (ie: “I measured…”)!

**Risk & Safety:** Type your risk & safety analysis here. Identify any potential risks and safety precautions needed. If your project is of no risk or minimal risk, you must state that in this section (ex: *“This project poses no reasonable safety risk.”*).

**Data Analysis:** Type your data analysis here. Describe how you will analyze your data. What calculations will you make? What numbers will you COMPARE? How will you show patterns and relationships (tables, graphs, diagrams)?

**Research (Bibliography)**: Type your bibliography below. List at least five major references (ex: science journal articles, books, websites) from your literature review. References should be in **APA or MLA** format (use easybib.com for help with citations). One of your five sources must be the one included below as an example:

- Society for Science & the Public. (2018). Retrieved September 7, 2018, from Society for Science & the Public website: <https://student.societyforscience.org/international-rules-pre-college-science-research?pid-312>.