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| **Complete this research plan template and submit this plan**  **with Form 1.**  **Please Note:**  **Additional information and forms must be included with the research plan if the project involves humans (Forms 2 and 2B) vertebrates (Form 4), or hazardous substances, activities or devices (Form 3). Please check with your teacher to make sure all appropriate forms are submitted to obtain approval.** | | | |
| **Student Name:** | | **Grade:** | |
| **School:** | **Teacher:** | | **Year:** |
| **Rationale: Include a brief summary of the background research that supports your problem. Why is your research important, and what (if any) impact might it have on society?** | | | |
| **Question/Problem:** | | | |
| **List appropriate variables if they apply to this project.**  Independent (manipulated) variable:  Dependent (outcome) variable:  Controlled variables:  Control group: | | | |
| **Engineering Goal/Expected Outcome/Hypothesis:** | | | |
| **Materials: List all materials and tools to be used in experiment, including construction, set-up or data collection/analysis. Attach additional pages as needed.** | | | |

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| **Procedures: List all procedures and experimental design to be used for data collection. Be as specific is possible so if others want to replicate your experiment, they know exactly what to do. If you use a kit or any type of ready-to-use or assemble system, the procedures MUST be detailed here. Include safety and disposal procedures. Attach additional pages as needed.** |

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| **Data Analysis: Describe the procedures you WILL use to analyze the data/results that answer research questions or hypotheses. Attach additional pages as needed.** |
| **Bibliography: List the major references (for example: science journal articles, books, internet sites) from your literature review.** |

Note: The research plan should NOT include experimental data, results, or conclusions.