GBSE STEM Expo Research Proposal Framework-

Name:

You may use this Form to fill in. This is for the Proposal ONLY- you do not do the data collection, just the proposal. **Note: you do not complete the project now, please wait for approval before collecting data.** After you complete the instructions that are in red, delete them. Clean up the formatting of the paper, and save in your google drive. Contact Mr. Scannell scannell@gresham.k12.or.us with ?'s

Need a Project idea: Brainstorming a Good Science or Engineering Question and Research Topic.

List some ideas, then identify one you would like to do.
Rationale : Write 3-10 sentences explaining why you are doing this experiment. Why did you choose to do it? What is important scientifically about this experiment? How is this experiment important to
society?
Research Question: What are you trying to find out? (science) What are you trying to do? (engineering)
Hypothesis/Engineering Goals: What do you think is going to happen? (hypothesis (science); expected outcomes (engineering)
Variables and for constraints.
Variables and/or constraints : Independent Variable
Dependent Variable
Control or constant variables
Explanation for each constant variable – How will you keep each constant or controlled? Why is it important to control each one?
provide the contract of the co

Procedures : Detail all procedures and experimental design including methods for data collection.
Risk and Safety: Identify any potential risks and safety precautions needed.
wisk and safety. Identify any potential risks and safety precautions needed.
Data Analysis : Describe the procedures you will use to analyze the data/results that answer research
questions or hypotheses.
List of Materials: List any equipment that you will need for data collection.
Resources : If you used an internet resource to get your idea, you MUST cite that using MLA citation
format. (Like science buddies!) Use an online citation maker to create your citation. *If you don't kno
MLA, just list resources or weblinks.