Electrical Engineer

1. “Will your device provide the electrical power (J/day) needed at St. Timothy’s school to solve the “problem” you chose?”
2. Provide analysis (explain) the electrical energy needs of school.
   * Claim: “My device will provide \_\_\_\_\_ (J/day), in which we only need \_\_\_\_\_\_ (J/day) of electricity for our solution.”
   * Evidence: Use your evidence from your analysis and research.
   * Reasoning: How does your evidence support your claim? (here is your “because” statement. Reasoning should also include the equations you used to get your EVIDENCE #’s)

Operations Manager

1. “What is the estimated cost of your group’s solution?”
2. Compare and analyze cost of currently available energy sources (example: cost to be hooked up to grid or cost of running generator, etc.) and the proposed costs of energy using your group’s solution

* Claim: “The cost of my groups solution will be $\_\_\_\_\_.”
* Evidence: Use the evidence from your research
* Reasoning:  How does your evidence support your claim? (here is your “because” statement)

Site Analyst

1. “Why is your energy device reasonable and realistic for the power needs of St. Timothy’s?”
   1. Claim: “My energy source is the most reasonable and realistic power source.”
   2. Evidence: Use evidence from your research on St. Timothy’s school and the surrounding area.
   3. Reasoning: How does your evidence support your claim? (here is your “because” statement)

Energy Engineer:

1. “How many times was energy converted or transferred in your device?”
2. Explain and diagram all appropriate energy transfers and conversions for your solution.
   * Claim: “Energy is converted \_\_\_\_\_ times and transferred \_\_\_\_\_\_ times in order to create enough energy for our solution.”
   * Evidence: use evidence from your efficiency calculations and your diagram of energy transfers as your evidence.
   * Reasoning: How does your evidence support your claim? (here is your “because” statement. Reasoning should also include the equations you used to get your EVIDENCE #’s)