

Project Log

<i>Date</i>	<i>Summary of Activity Performed</i>	<i>Time Spent</i>
Sep 16, 2024	Brainstorming and finding the topic for my SF project: Reflector Magic - Solisation optimization	1hr
Sep 18, 2024	Background research about relevant technology or approach: I research through PubMed on solar panels efficiency Paper 1: "Beamline development for energy-efficient systems" Paper 2: "Battery less IoT sensors powered by ambient energy"	2hrs
Sep 20, 2024	Background research about different types of reflectors to determine the most ideal for my project.	2hrs
Sep 23, 2024	Background research about solar batteries to better understand how energy storage work.	2hrs
Sep 25, 2024	After my extensive research, I was ready to propose my hypothesis.	30 minutes

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Sep 28, 2024	I sketched the initial design for my project which helped me to develop the initial concept for the solar panels.	2hrs and 30 minutes
Oct 3, 2024	Variables: I figured out the independent variable, controlled variable, and the responding variable of my project	1hr
Oct 11, 2024	I started prototype planning, I gathered all the materials I needed to build my prototype.	2hrs
Oct 15 , 2024	Prior to assembling my prototype, I cut out all solar panels to fit on the styrofoam ball, cut out aluminum foils into hexagonal shapes, and painted all strophomes for esthetic purpose.	2hrs
Nov 1, 2024	I measured the voltage then drained all solar panels' battery from 1.2 to 0.6 v.	1hr

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Nov 15, 2024	I put all the component together and built my design.	2hrs
Dec 1, 2024	Trial one of test 1: Spherical with Reflectors vs Flat Panel	1hr
Dec 14, 2024	Trial two of test 1: Spherical with Reflectors vs Flat Panel	30 minutes
Dec 18, 2024	Trial three of test1: Spherical with Reflectors vs Flat Panel	2hrs
Dec 21, 2024	Trial one of test2: Spherical without Reflectors vs Flat Panel	2hrs
Dec 23, 2024	Trial two of test 2: Spherical without Reflectors vs Flat Panel	2hrs
Dec 28, 2024	Trial three of test 2: Spherical without Reflectors vs Flat Panel	2hrs
Jan 1, 2025	Trial one of test 3:Spherical with Reflectors vs Spherical without Reflectors	2hrs
Jan 4, 2025	Trial two of test 3: Spherical with Reflectors vs Spherical without Reflectors	2hrs
Jan 11, 2025	Trial three of test 3: Spherical with Reflectors vs Spherical without Reflectors	2hrs

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Jan 18, 2025	I analyzed my data in preparation for classifying them.	1hr
Jan 26, 2025	Data Analysis, I put all the data I gather from 9 trials into different charts to help me analyze it.	4hrs
Feb 1, 2025	Conclusion, I gather my findings and wrote the conclusion based on the analyzed data.	2hr and 20 minutes
Feb 9, 2025	Sources of Errors, I worked on identifying the sources of errors that can influence the outcome of my experiment.	2hrs
Feb 15, 2025	Real life application, how my project can be beneficial in real life.	1hr
Feb 22, 2025	Bibliography and final review: I put all the online resources I gather information from throughout the research and experiment of my project.	2hrs
Mar 4 to 8, 2025	I designed and prepared the trifold for science fair	4hrs
Mar 9-10, 2025	I practiced my presentation for the science fair.	4hrs