

Science Fair Project Logbook

Improving Solar Panel Efficiency

Archer Pederson

Daily Log

Date	Activity	Additional info
Nov 2025	Background research	Studying the topic of a solar tracker.
Nov 2025	Background research	Continued research.
Nov 2025	Background research	I have all the information needed; background research is done.
2025-06-12	Design circuit	Designed on Tinkercad
2025-13-12	Make parts list	
2025-14-12	Order parts	Finding and ordering required parts.
2025-14-12	Parts arrive	All parts needed are at the ready.
2025-29-12	Writing code	Writing a code for the Arduino.
2025-29-12	Building circuit	Making the circuit in real life.
2025-30-12	Continue circuit build	
2025-30-12	Uploading code and initial testing	The code seems to be buggy...
2026-2-1	Bug fixing	Finding the issue in the code. After farther research the code has been discovered; it was a bug with the servo control
2026-2-1	Testing	After buying a flashlight, I used it to test the circuit. It seems to work great.
2026-9-1	Experiment day 1	Day 1 of gathering data. The circuit and code worked great.
2026-10-1	Experiment day 2	Day 2 of gathering data. Soon after the experiment was over, the battery died so I had to get replacements
2026-11-1	Experiment day 3	Day 3; final day, new batteries worked fine so I have all of the data required.
2026-17-1	Making data tables	I will use these data tables to make graphs.
2026-18-1	Making slides for school presentation.	
2026-25-1	Making slides for school presentation pt.2	
2026-27-1	Presented at school!	The presentation was great!
2026-27-1	Making a trifold for science fair.	

2026-2-2	Presented for Science fair.	I loved my trifold and the presentation was great!
2026-2-4	I made it into the Calgary wide Science fair!	I'm so excited!!!
2026-2-27	Worked on The CYSF website to fill in all required info.	Although I worked on it a bit, I was mostly checking it out so I didn't do much.
2026-2-28	Worked in The CYSF website some more.	Now I'm starting to get most stuff done. I filled in all of the information I already have.
2026-3-1	Finalized the rest of the required CYSF info.	I made the optional video of me presenting, made a project photo and so on.