

# Logbook for 2024-2025 CYSF

By Alexis Leung & Josie Kim

Date	Activity	Slideshow	Links
Oct. 29	Picked a topic of research (generating eternal power using magnets)	Started slideshow, created slide 1 (title slide)	-
Nov. 5	Chose our topic and created hypothesis	Added slides 2 (question of research) and 3 (hypothesis)	-
Nov. 19	Started browsing topics related to our project, checked out the CYSF requirements	-	-
Nov. 26	Checked out fun facts on magnets, didn't record anything, also didn't use anything for our slideshow	-	-
Dec. 10	Registered on CYSF platform, started changing the layout of the presentation	Changed background color	-
Dec. 17	Filled out Basic Project Info and Ethics Due Care, continued changing the layout	Continued changing background color	-
Jan. 14	Research what magnets are made of, researched what magnetic fields are (what they are and how they react with each other)	Added slides 4 (Ferromagnetic metals) , 5 (What are Magnets?), and 6 (Why is Eternal Power Important?)	1, 2, 3

Jan. 25	Used the research we did last week and put it into our own words on our slideshow	Finished slides 4, 5, and 6, added pictures to slideshow	-
Feb. 4	Brainstormed why eternal power is important to humans	Created slide 7, swapped slides 6 (How Is Our Experiment Going to Work?) and 7 (Why is Eternal Power Important)	-
Feb. 17	Conducted experiment, created slides 8-22 and worked on whole slideshow, recorded results on slides 13 and 14 in a table form, did our observations, thought of errors, recorded variables, and brainstormed application to the world	Created slides 8 - 22	-
Feb. 18	Researched what magnets were	Worked on slide 5 (What are Magnets?)	4, 5
Feb. 24	Brainstormed some ways to generate renewable energy today	Worked on slide 6	
Mar. 1	Reviewed slideshow with Josie, make sure it flows, turned our ideas into full sentences, and added pictures/diagrams, researched about fidget spinners and perpetual motion machines, discovered that the first law of thermodynamics has already been broken	Worked on slides 4-20	6, 7, 8
Mar. 7	Took photos of our apparatus and created diagrams, changed the layout of our slides, added diagrams to make our slideshow more	Worked on most of the slides	9-12

	<p>clear, reviewed most slides.</p> <p>Josie came over, we printed out most of our slides, we worked on our trifold, made a giant magnet</p>		
Mar. 8	<p>Josie came over again, we cut out colored paper, fiddled with the layout of our trifold, glued our slides to the colored paper</p>		
Mar. 9	<p>Finalized our trifold, Alexis glued everything onto trifold, filled out majority of things on the CYSF platform</p>		
Mar. 10	<p>Started rehearsing the presentation with Josie, took participant photo with Josie, took project and header image</p>		

# CITATIONS

1. <https://ece.northeastern.edu/fac-ece/nian/mom/work.html>
2. <https://education.nationalgeographic.org/resource/magnetism/>
3. <https://www.britannica.com/science/magnetic-field>
4. [https://phys.libretexts.org/Bookshelves/University\\_Physics/Book%3A\\_Introductory\\_Physics\\_-\\_Building\\_Models\\_to\\_Describe\\_Our\\_World\\_\(Martin\\_Neary\\_Rinaldo\\_and\\_Woodman\)/21%3A\\_The\\_Magnetic\\_Force/21.01%3A\\_Magnetic\\_fields](https://phys.libretexts.org/Bookshelves/University_Physics/Book%3A_Introductory_Physics_-_Building_Models_to_Describe_Our_World_(Martin_Neary_Rinaldo_and_Woodman)/21%3A_The_Magnetic_Force/21.01%3A_Magnetic_fields)
5. <https://pmc.ncbi.nlm.nih.gov/articles/PMC6323575/>
6. <https://dspace.sunyconnect.suny.edu/items/75f009da-13df-4837-a241-6540970c421f>
7. <https://medium.com/intuitive-physics/perpetual-motion-machines-why-they-dont-work-1e192d2c0f62>
8. <https://cen.acs.org/energy/nuclear-power/Energy-output-nuclear-fusion-reaction/100/i44>
9. [https://kids.kiddle.co/Laws\\_of\\_thermodynamics](https://kids.kiddle.co/Laws_of_thermodynamics)
10. <https://www.khanacademy.org/science/ap-biology/cellular-energetics/cellular-energy/a/the-laws-of-thermodynamics>
11. <https://www.grc.nasa.gov/www/k-12/airplane/thermo1.html>
12. <https://www.khanacademy.org/science/in-in-class11th-physics/in-in-11th-physics-thermodynamics/in-in-laws-of-thermodynamics/a/what-is-the-first-law-of-thermodynamics>

