

Dec 12: We decided to experiment to find out if infinite energy is achievable by making an infinite energy source using magnets and friction. We also saw some really cool topics about human genetics that we discussed, but we realized that it was too complicated and it needed lots of resources(Lab and other science stuff) that we didn't have or couldn't acquire.

Dec 13: We researched infinite energy and we watched videos on youtube explaining infinite energy and different ways infinite energy works. Some really good ways of making infinite are using magnets to rotate each other. But later on in the day we concluded that infinite energy is not possible due to friction, air resistance, and other reasons.

Dec 15: We researched infinite energy and gave it another chance. This time instead of watching videos explaining it, we watched videos creating the mechanisms. But there were lots of sketchy moments and they would only play it for 10 seconds and then the video would be cut. Personally I think that these are all fake but Hamza was very persistent in watching more.

Dec 16: We decided to switch from experimenting infinite energy to which type of renewable energy is the most efficient by using a solar panel, hydro turbine or wind turbine. We chose these 3 types of renewable energy because they are the most famous and well known. We started researching the different pros and cons of each one.

Dec 18: We researched which one is better and we also researched the difference in performance between each one. We found out that wind turbines are the most efficient and they produce more energy than 48,000 solar panels combined! But you also have to put into perspective that solar panels are much much smaller than a wind turbine.

Dec 21: We worked on making the slides and we added all the information we found out and made our hypothesis. Our hypothesis is that solar energy will be the best because when you drive around the city you will find a lot of solar panels and not a lot of wind turbines and no hydro energy machines. And solar energy is sthe most popular out of the three.

Jan 6: We found the exact materials we were going to buy for our science fair. The products we are going to buy is the following, trifold,, solar kit, hydro kit, and wind kit. We found great deals on Amazon but we are just waiting for confirmation form our parents so we could go ahead with the plan and buy them.

Jan 10: We researched the process to make the tests. We also saw some videos of people using the kits so when we buy them we have a very good and general idea of what we should do and how we can set it up. We also saw some videos about experimenting using plants and Hamza is really invested in that so we also put that into consideration.

Jan 13: We decided to experiment by using plants instead due to the lack of funds and time. We used the video we found before and we also looked up wayy more videos. We went to buy the seeds and we started germination. Some cool videos we saw were really interesting. We found out that if the plant doesnt have enough carbon dioxide it will barley make it through the process

of germination and one it does it will soon die. Its like humans, we need Oxygen to live and if we dont have enough we will of suffocation.

Jan 14: We researched some fast growing plants

Some of the fast growing plants we found are:

- Beans
- Mint
- Radish

We decided to use these seeds instead of the seeds we bought from before.

Jan 16: We researched if plants can live without sunlight

Plants cannot live if there is no sunlight which is because photosynthesis needs C02 to produce energy and if there is no sunlight there is no chemical reaction. We also relized that plants cannot live without water and we concluded that plants need everything for them to live and not die off spawn.

Jan 18: We switched from experimental to research because of the lack of time. We did this because if we go to the science fair we will be very uderprepared so we decided to research which type of renewable energy is the best from these three options, Solar, Wind, and Hydro.

Jan 21: We researched which one is better, and so far wind is taking the lead by A LOT! Solar is next and hydro is last. But we might unnerve some more information which could say that hydro is the best and wind is the worst so we are not locking in to the spots.

Jan 24: We found a few pages on this topic. We also found a really good resources which are can hydro and ae solar. These resources are amazing and have more than 100 pages about each one. I have to thank them because now we have sturdy proof. We also went on national geographic and found some more amazing information.

Jan 28: We put our research on the slides.

Jan 29: We finished the slideshow by putting the conclusion, future steps and graphs.

Jan 30: We finished the slideshow completely.

Feb 1: Started and finished making the trifold.

Feb 3: Made and practiced the script.

Feb 5: Science fair in school. We think we did extremely well and we are hoping for top three.

Fed 6: We got 3rd! Going to regionals.

Feb 20: Finished ethics form and Declarations on CYSF.

Feb 23: Moved research from google slides to CYSF.

Feb 28: Transferred research from google slides and added a few more pictures and graphs.

Feb 29: Transferred more research from google slides to CYSF.

Mar 3: Filled the acknowledgements.

March 11: We filmed our video.

March 12: We made some edits and uploaded it.

March 14: Uploaded everything else and finished.

Extra notes:

Looking back at the logbook we changed our idea so many times but we still managed to make third place!