

Science Fair Logbook 2024-2025

Nov 17

Today I found the idea for my project. I am a bit nervous about the manure, but I am sure it will all get sorted out in the end.

Nov 18-29

I made no progress on my project.

Nov 30 2024

Today I formulated some background research questions to better understand my project and know what parts of science I was actually working with. I also answered the first question and understood that I had to rephrase my originally phrased testable question a bit. I also noted down the citation from where I got my information to answer my first question. The record of my questions may be found in my scientific method part of my logbook. I also found that manure can be converted into biogas, but so can plants. I also wondered why and how biogas is released and will study that shortly after. I also emailed a farmyard for the manure that I will be needing for my experiment. Today I got a solid start on my project and am planning to continue my research tomorrow.

Dec 1

I continued my background research on biogas and food waste, which are important factors in my experiment. I found that a surprising amount of food is wasted each year. I also learned that there are many places where food is lost. For more details, please check the scientific method part of my logbook. I also found more citations. There is no reply from the farm yet. I am also planning on the materials of my experiment. It is really surprising how much food is lost just due to the carelessness of humans.

Dec 2

Today I made no progress on my project, but I found the 1 litre bottles I will be using.

Dec 3

Today I almost finished my proposal, except the hypothesis, as I will do that after finishing my background research. I will get my proposal signed and approved today. My project idea shall be finalized.

Dec 4

Today I did not add anything to my research, but started to make some of it into paragraphs. I plan on doing a mix up of actual research and paragraphs for the next few days or so.

Dec 5

Today I made one paragraph for my research, but have a few concerns about my project. One of them is that is my project actually going to help the world and is biogas actually a clean and environmentally-friendly source of energy.

Dec 6

Today I made no progress on my project.

Dec 7

Today I made another background research paragraph, and also looked into the questions that I had a few days ago to delve even deeper into my project. I found a facts about how biogas has many purposes, and can also be upgraded to other forms of fuel. I also found a really explanatory image.

Dec 8

I ordered some of the materials I will be using to complete my project, but I also found another question for my background research. This was how biogas is actually produced and what are the steps in the process. I am planning on finishing my research by the end of this week, and also finish my hypothesis and testable question along with it. I also plan on getting my proposal done by Tuesday.

Dec 9

Today I added to my paragraph about the process of biogas and found another topic for research. During the last few days I had been hearing a lot about the word digester. I wanted to know what it actually means and are there different types of them. I got started on this topic and plan on finishing it by tomorrow. I have also now started to just not make my research into bullet points, but make it straight into paragraphs.

Dec 10

Today I finished the paragraph that I started yesterday, but I was unable to get my proposal home due to the time I spent on the paragraph. I still plan on finishing my research by the end of this week. I will edit my paragraphs starting tomorrow, but I will also start citing some of my resources a few days later. Probably next week.

Dec 11

Today I made no progress on my project.

Dec 12

Today I finished my proposal and had it signed. My project was officially finalized and I also edited some of my paragraphs with a teacher. My research will be finished by the end of this week. But then again, plans could change.

Dec 13

Today I made no progress on my project.

Dec 14

Today I made no progress on my project.

Dec 15

Today I started writing my applications for my project as I do not have a means to edit my background research paragraphs. I will do that next week. The applications and next steps do not have much connection to my experiment. I can add and twine in some of my results later to relate it to my experiment.

Dec 16

Today I made no progress on my project.

Dec 17

Today I sat down one on one with my science teacher and had him read through my paragraphs. He gave me really good feedback and I will try to apply the edits into my writing. I will have him proofread and finalize my research by the end of the week. I also looked into how to make citations, and will work on a few of those every day since I have a lot of sources, citing them all at once would be extremely tedious.

Dec 18

Today I made no progress on my project.

Dec 19

Today I realized that my paragraphs were really disorganized and I had a bit of paranoia for plagiarism. That is why I sat down to rewrite them. I plan on finishing rewriting by Sunday night. Then I will be able to finalize my research by myself, but will check in with my teacher after the break.

Dec 20

Today I made no progress on my project.

Dec 21

I finished my background research for now, since new questions may arise later, but I will check in with my teacher after the break.

Dec 22

Today I came back to my applications and restarted them with the same intentions as before, but this time finished them. I will try add more detail as I move deeper into my project. I also created a new document and moved all of my new writing into it. It was all of the things I was actually going to use. I am not deleting the old one, since I will use it as a reference.

Dec 23

Today I made no progress on my project.

Dec 24

Today I made no progress on my project.

Dec 25

Today I made no progress on my project.

Dec 26

Today I made no progress on my project.

Dec 27

Today I made no progress on my project.

Dec 28

Today I made no progress on my project.

Dec 29

Today I made no progress on my project.

Dec 30

Today I made no progress on my project.

Dec 31

Today I decided to look back into my research and delve a little deeper into the factors that comprise my project. I will also plan on getting the manure throughout January and do the experiment *soon*. I plan on finalizing everything and working on my citations as well after the break ends. This will let my teachers know where I am and how to move my project in the direction in which it needs to go.

Jan 1

Today is new years day and i decided to really get going on the more minor parts of my project, such as the citations. I used Citation Machine for free and used the APA7 format to cite my sources. I still have a few links to do, and plan on doing them tomorrow. I will also try to finalize my research, applications, and next steps. I will also try to get my experiment done as soon as possible.

Jan 2

Today I finally polished of my citations and my dad messaged a friend of his from whom we are planning to get the manure. He replied, and we plan on picking up on Jan 4. I have all my materials, and just have to empty the soda bottles of soda and get everything into one place for the experiment to go as smoothly as possible. Since my experiment will be so close to the deadline of my project, I will also set up a small format for my observations, analysis, and conclusion. The experiment and those things are pretty much all that are left. I am really hoping everything works out and I secure my place at CYSF!

Jan 3

Today I got all my materials into one place, except for a few of the soda bottles, which still need to be emptied. I will be picking up the manure tomorrow and will do the experiment a few hours after I get the manure. I plan on recording observations for each day and having as less sources of error as possible. One of the things I am struggling with is the room in which I will keep the bottles. The basement will be too cold for any biogas to generate, and keeping a consistent room temperature is hard. My house has heaters, which may affect the controlled temperature and result in a source of error. Today I also came up with some more questions for my research.

Jan 4

Today I went to my dad's friend's place to get the manure. Since the cows reside outside, the manure was already frozen. I thought this would be the end of my project as fresh manure will be the only one that works, but according to my research, frozen manure retains the same nutrients as it did when it was fresh. Only the microbial activity goes down. I am hoping I can start the microbial activity back up during the experiment, which I plan on doing tomorrow. I checked on the manure at night, and all the ice had melted off. That was a step towards success, and things may be looking up after all. Then I realized that this may also correlate with reality, as manure might become old lying in the fields for a while before it is put into a digester. I guess I await tomorrow!

Jan 5

Today I did my experiment, but there were a few hurdles along the way. I had forgotten to remove the plastic rings from the mouth of the bottles, and they were giving me trouble with putting the balloons on. I also once poured too much distilled water twice and had to pour out a small amount of the newly created mixture. I also had trouble finding a place to keep the bottles and had to move them three times, but now they are in a secure place and are ready for the next 12 days. I will officially start my day 1 tomorrow.

Jan 6

Today I wrote down some of my observations, and noticed a lot of biomass was floating at the top of the bottles. I tried dislodging it on my one, but it would just float back up. I had to dislodge it, or it would block the biogas flow. It did not work. All my biomass just floated back to the top. I will have to come up with a solution for this issue.

Jan 7

Today I finished the left panel of my school tri-fold, and the balloons also inflated a little bit. They were mostly the mashed banana ones though.

Jan 8

Today the balloon that had inflated the most, deflated. I suspect this will be because of a clog in the biogas flow because of all the accumulation I was unable to fix. I will try to fix it today, by shaking the bottles lightly to help the anerobic bacteria do their work. I am also planning on restarting my tri-fold because i was ot quite satisfied with the gluing. I will restart if I have enough time and I can get another tri-fold. When I shook the bottles, some gas came into some of the balloons, and bubbles formed, w hich is a good sign of biogas production. I will shake all the bottles a little daily to keep the contents mixed and reduce blockages. It is not necessary for the entire blockade to go down once you shake it. It breaking apart is a good sign. Some blockages are still present, but I plan on dealing with them tomorrow. I will try to get my left panel ready again tomorrow, and make a few more cue cards. I also have to add to my applications.

Jan 9

Today I got a new tri-fold because I was not satisfied with my gluing and brought it home. I printed out almost all of my left panel images, except one. I have brought those home too. I made another cue card and added to my observations. The bottles seem to be coming along quite well, but I plan on moving them into the sunlight tomorrow. The weather is improving and the movement will most probably not be to much of a problem sice I shake them all the time to dislodge accumulated biomass every now and then. I have planned out a schedule and my project will be finished before the due date easily. I might also leave the bottles for over 12 days to give them a bit more time. This can give me better results, but I will only do this if I have extra time.

Jan 10

Today I finished my research cue cards.

Jan 11

Today I made no progress on my project.

Jan 12

Today I wrote dow some observations for my project. I plan on doing this intensely for the next week or so, and then I will create my conclusion and things later.

Jan 13

Today I also wrote down some observations, but also tried to collect some data. This was not possible because if I pulled my measuring tape to tight for exact measurements, it would distort the balloons shape, and accurate measurement acquirement wa really difficult. That is why I plan on standing next to the bottles tomorrow and blowing up other balloons of the same brand into that shape and measuring them for better accuracy. This is one of the best methods, and I have no other choice. The reason I am collecting data before the end of my experiment is that many of the balloons which had a lot of gas collected in them previously have now deflated. I might not necessarily use this data, but it will be useful to have at hand as a reference.

Jan 14

As it turns out, I will not be able to use a separate balloon for my data as I had previously planned. I did come up with a solution that was just as good. I decided to measure the water levels inside the bottles instead. This will work because I had filled up the exact same amount of water in each bottle and gas production makes use of this water. I plan on collecting my data on Friday, which is officially the last and final day of the experiment. I will start on my tri-fold in the middle of next week when I will have all of my material ready.

Jan 15

Today I recorded some observations for my project.

Jan 16

Today I was able to find a way to format my project. I had a chat with Ms. Burkell and she gave me some very crucial tips about including everything in my presentation to make it as good and genuine as possible. I now have a list of things that I need to finish to polish my project. I plan on doing all these things over the weekend and next week. I plan on presenting my project near the start of the week after next week (Jan 28). Since this is quite close to the deadline of the projects, I might also present in the middle of next week as time allows. I will check in with my teachers on this tomorrow. All of my teachers have given me fabulous advice and I have also finally come about to how to find a conclusion. One of the mashed banana bottles inflated extremely today and that would Mashed Bananas at the top of the list. I now have all the information that I need and have to get to work. Hello working weekend! 🤖

Jan 17

Today I worked out a few bits and pieces of my project and got a idea for how I would like to set up my tri-fold. I worked on my observations and analysis, as well as my conclusion. It was something, but I did not make much progress today.

Jan 18

Today me and my dad worked out how to shorten my large paragraphs so they would make my tri-fold more eye pleasing and effective. We managed to get through almost everything, and we planned on making it ready to print the next day.

Jan 19

Today me and my dad finished what we had started yesterday, and we pasted everything onto a powerpoint presentation so it would be easier to print. I planned on printing everything tomorrow in school.

Jan 20

Today I had some trouble printing my slides out because they got cut off from the edges. They then got printed double sided somehow. I then played with the scale and printed them out. I then cut them and glued them onto green cardstock when I arrived home. I did not have time to cut some of them in school using the paper-cutter, so I planned on cutting and printing another few things tomorrow. I also had a solid idea on how to set up my tri-fold.

Jan 21

Today I printed, cut, and glued everything that I needed to, but found I had to print a few more things, so I will do that tomorrow. I also printed out my title and I will cut the letters out and glue them on. I plan on having the tri-fold ready by the end of tomorrow. I also worked on my citations a little and finalized my presentation date with my teacher.

Jan 22

Today I finished my trifold and got it final and ready for the school presentation. I also printed out parts of my logbook and citations, and I will print the next few parts that I have to work on later

Jan 23

Today I worked on some cue cards and started to practice presenting. I was not that productive today.

Jan 24

Today I finished all of my cue cards and everything else that had to go with my project. Now I only have to work on practicing my presenting skills. I have a week to do so before the big fair.

Jan 25-26

Today I made no progress on my project.

Jan 27

Today I practiced presenting my project for Thursday,

Jan 28

Today I printed out an article and organized all of my stuff into a folder.

Jan 29

Today I set up all my stuff in the school library for the CYSF judging and practiced presenting my project for tomorrow.

Jan 30

Today I got judged by 2 judges for my project's potential to make it to CYSF. Fingers crossed! 🍀

Jan 31

Today I got the email which told me I had made it to CYSF!

Feb 1

Today I made no progress on my project.

Feb 2

Today I registered onto the CYSF platform and contacted one the teachers at my school via email so they can help me fill out the Due Care and Basic Information forms tomorrow. I will be on vacation for ten days after the 4th of February, so the more I can get done before then, the better.

Feb 3 - 15

I made no progress on my project.

Feb 16

Today I started some of the actual work on the platform and have started playing around with it.

Feb 17

Today I started my work on the platform and pasted my variables, hypothesis, procedure, and acknowledgements. I also uploaded a picture to come at the top of my online project. I also planned out how I wanted to plot out my research online and have finished one of my many paragraphs. I will do one each day and type them on in one day. I also contacted the science fair director at my school and will check in with her tomorrow. I think I should be able to get everything on the platform by the 21st of March.

Feb 18

Today I was supposed to meet with the teacher to whom I sent an email yesterday, but I got the timing mixed up and was unable to do so. I also worked on some of my research on the platform.

Feb 19

Today I emailed the teacher again and made plans to meet her on Thursday. I also worked more on my research on the platform.

Feb 20

Today I met up with her and she told me to put my participant image and experiment image on the platform, which I did when I got home. I also added a small bit of work to my research.

Feb 21

Today I printed out my research at the library and I am going to go through it to see if I plagiarized anything or not. I will also try and split the huge paragraphs up when I put things on the platform. I will write everything down in my own words and then will use AI to check for

plagiarism. I will not make it reword it for me, it will just tell me if I plagiarized or not. So far so good. I think I should be able to get everything on the platform by the 21st of March.

Feb 22-28

I have been working on breaking down my research into more readable portions and I also got some feedback on it, which I will follow to make my research as good as possible. I also need to add some pictures onto the platform and try to finalize my research soon. The only I will move on to the other parts of my project.

March 1

Today I made no progress on my project.

March 2

Today I made no progress on my project.

March 3

Today I made no progress on my project.

March 4

Today I made no progress on my project.

March 5

Today I made no progress on my project.

March 6

Today I made no progress on my project.

March 7

Today I made no progress on my project.

March 8

Today I made no progress on my project.

March 9

Today I made no progress on my project.

March 10

Today I made no progress on my project.

March 11

Today I finalized the last paragraph of my research and I plan on finalizing the entire project on the platform this week by Mar 16, 2025 .

Today I talked my coordinator and asked her if she could comment on specific portions of my project and she said she would try her best. I did not make much progress otherwise.

March 12

Today I worked on my applications and got a good start on them. I also uploaded some of my images from my experiment onto the platform for more visual representation.

March 13

Today I made no progress on my project.

March 14

Today I finalized my applications and next steps, and I might end up making them better if my science fair coordinator comments on them.

March 15

Today I made no progress on my project.

March 16

Today I made no progress on my project.

March 17

Today I worked on my citations and I will finish them tomorrow. I also plan on getting the video done by wednesday, as well as the photos for my observations, which I have not been able to upload onto the platform. There was also a meeting in the library at school today to discuss the timeline for the fair, as well as give everyone an idea about how to set up their trifolds.

March 18

Today I finished my citations and got a basic idea for all of what I wanted to cover in my presentation video.

March 19

I was planning on recording and uploading the video today, but it turned out I was not prepared enough and I had to have a better speech, as well as better points. I decided to come back to it tomorrow and make better notes and cue cards before I start recording for the final video.

March 20

Today I made some cue cards and recorded, as well as uploaded the video onto the platform. My platform work is finally over! 😊

