

Daily Journal Planning!



Friday Oct 25, 2024

On October 25th, 2024, we began brainstorming and researching potential ideas for our upcoming science fair project. We were researched on topics related to either medical science or food science, as we felt that our prior experience would give us an advantage. The previous year, we had both worked on a Heritage Fair project centered around the discovery of insulin, where we explored the complex relationship between diabetes and the impact of diet on its management. This research was both enlightening and rewarding, and we felt confident that revisiting a similar theme would allow us to leverage our knowledge and skills, leading to a more thorough and successful project. We understood that by selecting a topic we were already familiar with, we could dive deeper into the science, make connections we hadn't explored before, and ultimately create a project that was not only informative but also complex. Our goal was to build on our past research to explore new angles and contribute fresh insights to the field. We used Wikipedia and a website called Science Buddies to help us with some basic ideas on some medical outbreaks.

Monday Oct 28, 2024

Today, we focused on developing a series of ideas related to various health conditions, including autoimmune diseases, blood pressure regulation, heartburn, and glucose metabolism. We took the time to research each of these topics in depth, seeking out the most current information and expert insights to deepen our understanding. Our goal was to become well-versed in the underlying mechanisms and treatments associated with each condition, so we could approach them from an informed perspective. As we discussed each idea, we carefully evaluated its potential, ensuring that each one met our criteria of being strong, feasible, and challenging enough to push us toward meaningful, high-quality results. We strived to ensure that while the ideas were ambitious, they remained within the realm of possibility, striking a balance between innovation and practicality to ensure that we could achieve the best possible outcomes.

Tuesday, Oct 29, 2024

On October 29, 2024, we dedicated time to refining and narrowing down our initial list of ideas, ultimately selecting the five strongest and most intriguing concepts to explore further.

After careful consideration and discussion, we decided to focus on the following topics: "How Do Antacids Affect Heartburn?", "How Do Microorganisms Affect Preservatives in Our Everyday Foods?", "What Are Afterimages and What Can They Cause?", and "How Sweet Is It? Measuring Glucose in Your Everyday Foods." Each of these topics stood out due to their relevance, scientific interest, and potential for in-depth research. This process of narrowing down the ideas allowed us to focus our efforts on the most promising avenues, setting the stage for a more focused and productive research phase. We are excited about the potential of these topics and eager to dive deeper into understanding their impact on our daily lives.

Saturday, Nov 9, 2024

Today we carefully reviewed each of the ideas once again, discussing they were all to notch. After much consideration, we collectively agreed that the concept involving microorganisms was the most promising. It stood out as both a challenging and engaging project, and, importantly, the time required to complete the experiment was relatively short—less than a month. This made it a practical choice, as we needed to balance complexity with the constraints of our timeline. However, we acknowledged that in case this primary idea faced any unforeseen challenges or didn't yield the desired results, we had a solid backup plan. The alternative, based on glucose, would serve as our contingency or Plan B, ensuring that we were prepared for any situation that might arise.

Monday Nov 18, 2024

Today, we carefully reviewed each step of our microorganisms project, making sure to identify and correct any errors that might have slipped through during our earlier planning stages. As we went over the details, we came to a surprising realization: the experiment, as originally designed, would actually take a full four weeks to complete. This meant that we would need to meet almost every day for an entire month in order to follow through on the experiment's timeline. Both of us agreed that this was far too much of a commitment, especially with our busy schedules. With the clock ticking and the project deadline approaching, it became clear that we needed to come up with an alternative plan. That's when Grace suggested, "Why don't we just use Plan B?" After giving it some thought, we both agreed that Plan B seemed like the perfect solution. As a result, we decided to shift our focus to the glucose project, which not only fit better with our available time but also promised to yield interesting results without the long wait. Now, with a fresh new direction, we're excited to dive into this revised project and start working on it right away.

Tuesday Nov 19, 2024

Today at school, we were given a special opportunity to stay indoors during recess to sign up for the Calgary Youth Science Fair and complete a few necessary surveys. During this time, we worked on filling out the Basic Project Info form, which included important details about our project, and we also began the Ethics Due Care 2A form, which is required to ensure our project follows all ethical guidelines. It was a productive period, and we made significant progress on the paperwork. Later in the day, we received some exciting news: our Basic Project Info form

had been reviewed and approved, and our project had officially been accepted into the Calgary Youth Science Fair. It was a pleasant surprise, and we felt a mix of excitement and pride, knowing that our hard work had paid off and we were now one step closer to showcasing our project in the fair.

Thursday Nov 21, 2024

Today on November 21, 2024, after school, Grace and I found some time to have a quick call to go over and finalize the Ethics Due Care 2A form. We reviewed each section carefully to ensure we were following all the necessary ethical guidelines for our project. The form required us to address key issues related to safety, fairness, and the potential impact of our work.

Friday Nov 29, 2024

Today, once again, we had the opportunity to stay indoors during recess to focus on some important tasks for the Calgary Youth Science Fair. We used this time wisely to complete the Declaration form, set up our Daily Journal, and organize all the materials we'd need for the project. Getting the journal set up was particularly important, as it will help us track our progress and document our work along the way. After we finished these tasks, Mr. Baillie took some time to walk us through key parts of the science fair rubric. He made sure we all understood the criteria that our projects would be judged on, covering everything from the quality of our research to how well we present our findings.

Friday Dec 6, 2024

Today, Grace took the lead in setting up our Google Slides presentation, creating a polished and professional title slide to introduce our project. She also added a "Thanks for Listening" slide at the end to wrap up our presentation on a positive note. Once she had the basic structure in place, Kamran went over the slides to make sure everything was aligned and looked just right. Kamran checked the text for any errors, made sure the design was consistent, and ensured the formatting was clean and easy to read. We also discussed the overall flow of the presentation to make sure it would smoothly guide our audience through our project.

Tuesday Dec 17, 2024

Since this week marked our final days at Webber Academy before the winter break, we focused on maximizing productivity and preparing for the work ahead. Our first step was to coordinate schedules and identify the days during the break when we would be available to meet to get some work done. After finalizing the dates, we moved on to organizing the tasks we aimed to accomplish at each meeting, ensuring we had a clear plan of action. Next, we engaged in a detailed discussion about the different foods and juices that we would be testing to find their glucose levels and how they can affect people with diabetes.

Thursday Dec 26, 2024

Today, we started to read over and understand the dilutions part of our experiment. The water dilutions are meant to be used as controls where once we test the foods using the diastix glucose strips we can refer to the controls to be able to see the glucose concentration. We will also have to dilute the viscous substances such as peanut butter, molasses, melted ice cream, and salad dressing. After this, we discussed when we could meet up to start doing some background research. We decided to meet on December 30, 2024.

Monday Dec 30, 2024

Today we met at Kamran's residence to begin our background investigation. We discovered several useful websites, but we concentrated mostly on those that describe how consuming low GI foods affects diabetes. We were able to do some research on the slides, the website, and in our notebook. In our binder grace wrote notes for each step that we had completed so far, created our table of contents and added the dividers to our binder.

Monday Jan 6, 2025

Today we created the "Reason I Wonder This" slide. Once we had completed that we revised over our past background research and started some new background research. We also started reading over and planning our background research report page. We also created a google doc to put all of the websites we had written down from our background research. Finally we organized the websites into an M.L.A. format with the help of Grace's sister.

Thursday Jan 16, 2025

On January 16, 2025, we continued putting notes into our notebook and started planning out our background research report. We decided that we would take our background research, finalize it more and then make paragraphs out of them that would then be used in our report. For our sources cited we would make sure that all of our resources would be put in a MLA format and put at the end of our essay.

Friday Jan 17, 2025

Today we discussed what parts of our background research we would include in our slides. We decided to include some parts on diabetes, how glucose affects diabetes and examples of lifestyle changes that could be helpful for diabetes management. Once we had completed this we continued thinking about our hypothesis and adding our procedure steps into the science fair platform, slides and binder.

Friday Jan 24, 2025

Today we got to stay in during recess to work some more on our project. We were able to come up with our hypothesis which would be "If a food contains preservatives, it will have a greater glucose concentration." This hypothesis would be put into the platform, slides, and binder. Finally we decided that on Sunday we would meet up to plan, finalize, and complete every step until the procedure which we would do over the next weekend.

Sunday Jan 26, 2025

Today we met at Grace's house to complete our work. We completed our Quantitative and Qualitative data pages and prepared a chart in which our results and observations would be recorded. Then we made sure that everything was looking professional and neat before we continued putting notes into our notebook. Finally we decided to complete our application and acknowledgement steps as these can be done beforehand and do not require any results.

Tuesday Jan 28, 2025 - Saturday Feb 1, 2025

Throughout these days we prepared for the experiment as the experiment would be done at Kamran's house. We read over the procedure multiple times and went over what we would do if any problems were encountered during the testing. On Jan 29, 2025 our materials arrived. In the evening of Feb 1, 2025, Kamran started setting up and getting materials out for the procedure that would happen the next day. Finally we created a chart in which once the results from the project were obtained we would have somewhere to store them quickly.

Sunday Feb 2, 2025

Today was an extremely significant day as we would be completing our experiment. Before Grace arrived at Kamran's house, Kamran started to get all of the foods that could not sit out overnight and measured cups of water for them to reach room temperature. At around one o'clock Grace arrived and we started our experiment. We started off with the controls and after about forty-five minutes we had completed them. Next we tested the controls to make sure they were accurate and began testing our foods. Using the diastix glucose test strips we tested each of the fourteen foods for each trial and took note of them on our observations document.

Monday Feb 5, 2025

Today we organized all of our results including our water temperatures, control temperatures and glucose concentration of foods. We put this information into charts and paragraphs, before adding it to our slides, platform and binder. Next we created an experimental set up document and explained what we did before we actually tested our foods. After school we added all of the pictures that we had taken during the experiment to their corresponding documents. At the end of the day Kamran also took the trifold home in order to start imagining how our information would be arranged.

Sunday Feb 17, 2025

Today, Kamran came to Grace's house to start finding averages for our data analysis, create graphs and organize our binder. We started off by taking the results from our trials and using an average calculator to find the average of each food and record them. Next we organized the foods into processed and natural groups and averaged each of the foods from there and figured out if natural foods had more glucose or processed foods. Next we began putting our results into Microsoft Excel to create graphs. We made a graph for each trial and an average graph. Finally we made sure that all of our pages were in order and printed out in our binder.

Monday Feb 17, 2025 - Friday Feb 28, 2025

Throughout this timeline we mainly focused on printing our pages for the trifold, gathering materials and writing the presentation. On Feb 23, 2025 Grace came over to Kamran's house to finish writing the presentation. We took our binder and slideshow and changed the information to be presented in a more creative way. Next we traveled to different Michaels and Staples stores to ensure we had everything we needed to put on our trifold. We decided to have a white background with sparkly gold letters with red and blue mounting paper for our information. Kamran also happened to find a pancreas model which is where insulin is produced in the body in his basement. We decided to use this while presenting.

Sunday Mar 2, 2025

Today Kamran went to Grace's house to complete the trifold. Kamran began by adding the border to the board. We used a light blue border and wrapped it around the tri fold but left spaces between the folding creases. While Kamran was doing the border, Grace began organizing our pages of information onto our mounting paper. We decided to put pages with pictures on red mounts and pages without pictures on blue mounts. After we taped them onto the mounts we moved onto the letters. We used green painters tape and placed it down on the trifold. Then we stuck the letters straight against the strips to make nice lines centered on the board. Unfortunately we did not have time to tape our pages onto the actual trifold so we decided that we would complete it next week. Before Kamran left, we quickly added any extra pages into our binder that were not already added.

Monday Mar 3, 2025 - Tuesday Mar 11, 2025

During these days we mainly focused on memorizing our presentation and making sure we had everything necessary to present on March 12. We called many times and read through the presentation until we had the majority of it memorized. We also presented to our parents and presented to Grace's mom who is a doctor for any possible feedback that we could take into account. Once we had completed we felt proud that we had finished one of the biggest projects that we would do in school in time. Thank you.

