

LOGBOOK ENTRY 11

~~2024/2/26~~ 2024/2/26th

Today at Science Fair, we worked on our CYSF tabs. We also needed to convert our logbook to a google doc. We also were given our large tri-fold. We decided that Diya will take the tri-fold and manage it's control.

2024/2/27th

On the 26th, Mrs. Kale told us that we should come at both snack and lunch recess for indoor recess. (Only on the days we have to stay indoor) So we went at snack and did our CYSF tabs and tried converting our logbook info to a google doc. But since we have a lot of info in our logbook, we decided that we will keep recording in this logbook until we are done all our CYSF Tabs and experiment. Then we will take a photo of our logbook and then insert it into a doc. Then at lunch, we worked on making a new slide-show.

2024/3/1

Today, since we had 2 periods of science, we were able to work on science fair. The first thing we did is call our parents

LOGBOOK ENTRY 12 —

2024/3/1-continued

This is because we found out we just have 1 more week to work on our science fair tabs. So after some phone calls, I (parneeka) was able to go to Diya's house to work on the petri dishes. At her house, we cooked the agar powder with some water on the stove. Once it boiled, we evenly spread it into 10 of the petri-dishes. Then we waited about 10-15 minutes for the agar to set. After 15 minutes, the agar became a jelly like consistency.

2024/3/5th

Today we did the acknowledgement, procedure and sources of error tab on CYSF.

2024/3/9th

We converted some of the CYSF tabs into our canva presentation (procedure, conclusion, added experiment images.)

2024/3/11th

Today at science club, we edited some CYSF tabs then put it on the canva and then we converted it into a google slides. Then we had Mrs. Kale print out our slideshow. And Ms. Sylvan gave us cardstock. I (parneeka) then went to Diya's house to finish the tri-fold. (we cut out our slides)

LOGBOOK ENTRY 13

2024/3/12

Today we basically finished all our CYSF tabs except for presentation and attachments. Today Diya came to my house (parneek'a) We finished all our cutting and were able to start glueing them on cardstock. Alongside that, we also finished our script. We now plan on meeting tomorrow to finish everything and complete our city fair work.

2024/3/13

Today we finished both our tri-fold and video

2024/1/29 -

LOGBOOK ENTRY 8

2024/1/29th

Today diya brought the tri-fold to school. Now all we need is our experiment data. (and script) Today at science club, Ms. Kate told us that we need everything ready by next science club. (1 week)

2024/2/4th

Today we wrote our script

Introduction

Diya - have you ever wondered if hand dryers and paper towels add bacteria instead of cleaning?

Parneeka - Well we did, so we made a project on "what's the cleanest way to dry your hands." So let's get in to our research dedicated to it.

Diya - When using public restrooms, people often use hand dryers without considering if they're clean. But is this the best way to dry hands?

Parneeka - Well not necessarily. According to an article by Harvard Health Blog, hot air hand dryers in public restrooms pull bacteria from the air and dump them onto newly washed hands. How does bacteria spread anyway?

Diya - Bacteria can be spread from 1 person to another through food, air, water and vectors. Bacteria cells have parts, they have 1 known as the flagellum which has 3 parts. The motor, hook and filament. The movement of the filament allows bacteria to move around.

2024/2/14

LOGBOOK ENTRY 9

2024/2/14th

Parneeka - So according to our research, public hand dryers spread germs and only add to the number of bacteria on your hands. Now our question is, what is the best method to dry our hands while keeping them clean?

Diya - To answer this question, we need to find out if just using a hand dryer and/or a paper towel, is sanitary. After all, the purpose of washing your hands is to clean them. To find out if hand dryers & paper towels have unwanted bacteria, we will be experimenting using petri-dishes.

Parneeka - We anticipate that simply shaking your hands dry is the cleanest method of drying your hands.

Diya - This is because when drying your hands, the hand dryers have lots of bacteria that have been pulled in w/ the air, and they are just blown onto our hands making them dirtier. We predict that paper towels aren't the best solution either. People may touch paper towels while getting their own. So we believe shaking our hands dry is the best overall.

Parneeka - *goes through the experiment- and describe it*

2024/2/18

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2024/2/5

LOGBOOK ENTRY 10

2024/2/5th

Today at science club, we printed out our script. Now all that's left is our data of the experiment. For that, we needed to convert the canva slides into google slides so it prints properly. But we were not able to do it during class, so Diya had to take the tri-fold home to glue on the experiment after she printed it.

2024/2/8

We were selected to go to city fair!
We were also in 1st place.

2024/2/12

Today at science club, we worked on the Ethic Due Care 2A. Ms. Lizotte also came in and gave us recommendations on what we can add.

- Do multiple trials (repeat our experiment multiple times)
- Add our variables
- We personally also want to create a new slideshow because I personally think that it will be easier to work around

(Cat home - Parneeka POV) At home, I decided to work on CYSF. Which is decide a new slideshow. With a new slideshow, I think it would be easier to work around.

2024/1/8th-12

Logbook Entry 3

2024/1/8th

Today we have returned to school after our 2 week winter break. We were going to start researching during science club (which is after school from 3:15-4:00) but Parneeka was not able to come. So even though Parneeka was absent, Diya was present at science club. During her time at science club, Diya made a power point on canva for our research. She made slides on each thing we plan on researching as well as making/writing the slide on/focused on our Big question.

2024/1/15

Parneeka did the research on ~~why~~ how bacteria spreads in general. (I did it at home as I was not able to go to science club.)

Research: How does bacteria/germs spread? - Bacteria can be spread from one person to another through food, air, water and vectors. (vector = living-organism) (source - ncbi.nlm.nih.gov)
Bacteria has parts. A bacteria cell has a part known as the flagellum which has three parts. The motor, hook and the filament. The movement of the filament allows the bacteria control of it's movement around our environment(s) (source - medicine.yale.edu)

2024/1/15-18th

Logbook Entry 4

2024/1/15-continued

Diya also did some research on how bacteria can get on/spread on automatic hand dryers

Research: How do hand dryers spread bacteria? - Hot-air hand dryers (aka automatic hand dryers) in public bathrooms pull bacteria from the air and dump them onto newly washed hands. (source - Harvard Health Blog)

2024/1/18th

Since we already did ~~our~~ ^{our} equal share of individual research, we focused on things we need to get done together. So we currently are reviewing our research slides. We also are adding an introduction. (see below)

↳ Drying your hands - When using public restrooms, people often use either hand ~~dry~~ dryers or paper towel without considering if their clean. But are they the only or best way?

Diya is now taking the introduction and putting on the slides.

Big Question - According to research, public hand dryers spread germs and only add to the number of bacteria on your hands. The question is, what is the best method to dry our hands while keeping them clean?

Diya also copied this onto our slides.

2024/1/25-28

LOGBOOK ENTRY 7

2024/1/25

Today the petri-dishes arrived. We plan on taking them to school tomorrow (Friday) and split it so we can both have an equal share.

2024/1/26th

Today at school, we tested our petri-dishes in the washroom. We tested the paper towel, and Kleenex. We also tested Aiknoor's hands too. We tested her hands by first getting her to wash her hands with soap, then getting her to shake 1 of her hands dry and 1 just left to air dry. Now we are also trying to convert our canva presentation into a google slides. Because when we printed our canva presentation ~~it~~ it only printed out half.

2024/1/27-28th

Diya had took the tri-fold home as well as the petri-dishes. For the tri-fold she cut the research papers smaller and glued them on the tri-fold. She also cut out ~~the~~ flowers for decoration. For the petri-dishes, Diya is going take a picture of them for the next week.

2024/1/19-21

Logbook Entry 5

2024/1/19th

Today we focused on getting our hypothesis done so we can then submit our canva slides by Sunday (Jan 21) for Ms. Kale to print them.

Hypothesis-We anticipate that simply shaking your hands dry is the cleanest method of drying your hands. This is because when drying your hands, the hand dryers have lots of bacteria that may have been pulled in with the air, and they are just blown onto our hands making them more dirty. We predict that paper towels are not the best solution to reach for either. People sometimes touch paper towels while getting their own. (which can add to bacteria build up) So in conclusion, we believe shaking our hands dry is the best way to safely dry our hands.

2024/1/20

Today, parneeka went to Walmart to get our tri-fold. Diya also got decorations. (stickers and gems)

2024/1/21

Today we ~~finished~~ finished our Canva slides

2024/1/22

Logbook Entry 6

2024/1/22nd

Today we submitted our canva slides. It's 1 day late because I thought Diya was gonna turn it in and diya thought I was going to turn it in. Now we are going to work on the tri-fold the next time. (meaning the next time we have science fair time) We already have the needed supplies (construction paper, markers, paint markers, sticker, decorative-gems) Our theme is a pastel blue and yellow.

I (parneeka) also did some work at home. Here is the purpose of our project.

↳ The purpose of our project is to find out if just using a hand dryer and/or a paper towel is sanitary. After all, the purpose of washing your hands is to clean them. Leaving no excuse for unwanted bacteria. To find out if hand dryers and paper towels harbor unwanted bacteria, we will be experimenting on them with petri-dishes to come to our conclusion.

After all this, we just need our experiment, conclusion, procedure and our data. (graph) This all really is based around our project. We recently just ordered the petri-dishes from amazon with a estimated delivery date of Jan ~~26~~ 26-29. (so like next week) But it should take 1 day to complete.