January 27

- Meeting with Mr. Mason about science fair.
- Only 4 projects are submitted from Sunalta.
- 4 projects will be submitted by March 1 and winners get to improve their project till March 19.
- My science fair project is about bluetooth controlled car that I'll build at home.
- Format of presentation is currently unknown.

January 28

- Second meeting with Mr. Masuch (without class).
- Project is going to be on a link and winners share their screen on google meet and show our project and video.
- Science fair title is "Self engineered bluetooth car.

January 29

- Topic for science fair.
- Does the amount of Alka-Seltzer tablets affect how long and/or the intensity of a snowstorm in a jar.

February 3

- Ingredients: pump, baby oil, jar, glitter, alka seltzer (with citric acid and sodium bicarbonate/baking soda).
- Chemical ID for baking soda, citric acid, oxygen, oil and carbon dioxide.
- Carbon dioxide is obviously CO_2.
- Oxygen is O_2.
- Baking soda is $NaHCO_3$.
- Citric acid is $C_6H_8O_7$.
- Oil is C_8H_{18}.
- Water is H_2O

February 8

- Slight change to project
- Project is comparing whether the type of oil makes a difference on how big the bubbles are with equal amounts of water and alka-seltzer tablets per jar.
- Molecular formula for the oils:

Canola oil: $C_{57}H_{110}O_6$

Olive oil: $C_{83}H_{164}O_{10}$

Sesame oil: $C_{25}H_{22}O_{10}$

Peanut oil: $C_{30}H_{45}N_9O_5$

Coconut oil: $C_{33}H_{62}O_6$

Grapeseed oil: $C_{32}H_{50}O_{11}$

February 9

-Plan for science fair:

Step 1: Find the molecular formula for the ingredients.

Step 2: Find the chemical reaction for the ingredients at the showstorm.

Step 3: Make a hypothesis based on the molecular formula. Since the snow is actually painted carbon dioxide the formula with the highest number beside the C should be the oil that produces the biggest bubbles.

Step 4: Get the materials and make the showstorm.

Step 5: Observe the showstorm and fill information on the website of CYSF.

Step 6: Conclude the project and find an implementation of the science fair.

February 14

-Science fair topic change:
Mix Alka seltzer tablets with cold water, then room temp water then hot water. Observe rates of how fast the reation occurs in each jar and why does the reaction occur on that specific temperature of water.

-Do hypothesis and research for project.

February 27

I will make a table on which I will note down observations. It will look like this:

Hot Water	Room temp Water	Cold Water	Control
Does the reaction occur at the same time in each jar?			
And if yes, then how long does it sustain.			
If they don't start at the same time, what is the difference between the start times?			

Continued on next page:

February 27

Hot Water	Room temp Water	Cold Water	Control
How high do the carbon dioxide bubbles go?			
How long does the reaction last in each jar			

I will also make another table for my results, which will look like:

Data table

Water Type	Reaction time (in minutes and seconds)	Cold
Warm		71.9
Cold		8.2
Room Temp		22.5
Control		22.2