Science Fair Logbook

2025-2026

Gobind Sarvar School

Calgary, Alberta, Canada

Grade: 11

Ajeet & Harvinder

Title of the project:

Agar Armor: The Biopolymer Plant Shield

December 2025

Dec 14, 2025:
We officially finalized our science fair topic and confirmed our research focus on microplastics, agar agar, and plant growth. We also decided that our project would include background research, an experiment, and a physical model.

Dec 15, 2025:
Harvinder worked on background research about microplastics and their environmental effects. Ajeet began planning the plant experiment and researching suitable plant species and growth conditions.

Dec 16, 2025:
We discussed how agar agar could be used as a comparison material to microplastics. We outlined the sections of our project and divided responsibilities clearly between research, experimentation, and model-building.

Dec 17, 2025:
Worked together to start organizing research notes into clear categories. Harvinder focused on diagram analysis related to soil, microplastics, and heavy metal movement.

Dec 18, 2025:
Did not make much progress today because we were busy with other school assignments and extracurricular activities.

Dec 19, 2025:
Ajeet continued developing the experimental setup for the plant growth experiment, including variables and controls. Harvinder refined the background research notes.

Dec 20, 2025:
We met briefly to discuss how our experiment and research would connect to a real-world environmental problem. We adjusted our research question wording.

Dec 21, 2025:
We were too tired after a long school week and did not complete much work today.

Dec 22, 2025:
Began winter break. We planned to use the break to complete most of our research and preparation. We set goals for the next two weeks.

Dec 23, 2025:
Harvinder worked extensively on background research, focusing on how microplastics affect soil structure, plants, and nutrient movement.

Dec 24, 2025:
Ajeet worked on detailing the plant experiment, including materials, procedure, and expected outcomes.

Dec 25, 2025:
No work completed due to holiday celebrations.

Dec 26, 2025:
We worked together to connect agar agar research with microplastic pollution and sustainability. We discussed how agar could act as a biodegradable alternative or additive.

Dec 27, 2025:
Harvinder completed diagram analysis explaining how microplastics influence heavy metal movement in soil and plant uptake.

Dec 28, 2025:
Ajeet refined the experimental design and considered possible errors and limitations. We also discussed how results could be represented visually.
Dec 29, 2025:
We began planning our physical model, deciding what materials to use and how to clearly show microplastics, agar, and soil interactions.
Dec 30, 2025:
Continued working on research organization and started drafting explanations that could later be used on our trifold.
Dec 31, 2025:
We reviewed all progress made during winter break. This was one of our most productive periods, as we had more time to focus on the project.

January 2026

Jan 1, 2026:
Minimal work was done due to New Year's Day, but we briefly reviewed our plans for January.
Jan 2, 2026:
Ajeet focused on the extensive plant experiment details, including growth stages and data collection methods.
Jan 3, 2026:
Harvinder finalized background research sections on agar agar, conventional plastics, and microplastics.
Jan 4, 2026:
We worked together to ensure our research sections were scientifically accurate and clearly written.
Jan 5, 2026:
Started thinking about how our model would visually support our conclusions and research findings.
Jan 6, 2026:
Did not work much today due to feeling tired and overwhelmed with schoolwork.
Jan 7, 2026:
Brief meeting to discuss progress and confirm that our responsibilities were balanced and on track.
Jan 8, 2026:
Ajeet continued focusing on experimental analysis and potential results interpretation.
Jan 9, 2026:
Harvinder edited and polished diagram explanations and background research for clarity.
Jan 10–24, 2026:
During the last two weeks of January, we had multiple exams. Because of this, we were not able to work as much on the project. We mainly reviewed notes occasionally and made very small edits when possible.
Jan 15, 2026:
Started experiment: continued logs until the end of January
Jan 25, 2026:
After the exams ended, we resumed working more actively. We reviewed all sections and identified what still needed improvement.
Jan 26, 2026:
Worked together on building and refining our model, ensuring it accurately represented our research.

Jan 27, 2026:
Started preparing content for our trifold board, deciding how to organize sections visually.
Jan 28, 2026:
Finalized text that would go onto the trifold, including simplified explanations of complex research.
Jan 29, 2026:
We worked on final touches to our trifold board, adjusting layout, wording, and visuals.
Jan 30, 2026:
Continued making final adjustments to the trifold and practiced explaining our project clearly.
Jan 31, 2026:
Experiment concluded, completed (last log)

February 2026

Feb 2, 2026:
Today, we reviewed all of our information one final time and prepared our presentation scripts. We focused on being confident in explaining our research, experiment, and model for the science fair.