

Title: Biodegradable Packaging that Detects Food Spoilage and Rot- Logbook

Name: Mariam - Grade: 8 - Renert School

DATE	ACTION	RESOURCES USED	OTHER NOTES
September 19, 2025	Started base research for project ideas. Found topics and various research websites. Opened school proposal slideshow.	Google slides.	NA
September 21, 2025	Continued background research as well as chose template for proposal.	Google Slides, National Geographic, and Cleaveland Clinic Health Centre	N/A
October 3, 2025	Worked on background research and completed topics needed for research proposal. Email to mentor was sent	NA	N/A
October 11, 2025	Completed all proposal presentation as well as revised and took feedback from mentor (Sara Bourke)	N/A	N/A
October 24, 2025	Presented proposal at school and was given direct feedback.	N/A	N/A

Title: Biodegradable Packaging that Detects Food Spoilage and Rot- Logbook

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November 6, 2025	Received formal email, made it to science fair.	<ul style="list-style-type: none">• Gmail	N/A
November 10, 2025	Made plan/timeline in order to succeed	<ul style="list-style-type: none">• Google Docs	N/A
November 12, 2025	Completed 2 research questions	<ul style="list-style-type: none">• All sources are in docs and APA cited	N/A
November 13, 2025	Completed research questions and started procedure written. Research questions, ph values, ammonia, detectors, and natural indicators	<ul style="list-style-type: none">• All sources are in docs and APA cited	N/A
November 14, 2025	Finished 3 research questions, How indicators work?, Accuracy of indicators?, etc	<ul style="list-style-type: none">• Google docs and cited resources (PDFs and Webs) on google doc	Complete all research by end of November and put most into completed paragraphs

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November 15, 2025	Completed 3 research questions along with started time line for rest of project.	<ul style="list-style-type: none">All resources listed on docs with APA	N/A
November 16, 2025	Completed ½ of research question, in progress procedure and planning	N/A	N/A
November 17, 2025	2 research questions completed. Fully drew out project procedure on paper and planned trials and observation ideas	N/A	Approx. 12 research questions left, find ammonia probes and research where to buy and how to use them with a liquid concentration.
November 18, 2025	Reformatted research paragraphs and continued research	N/A	Nearing the end of research
November 19, 2025	Almost done project plan as well as finished 2 research questions/topics.	N/A	Complete timetable for details

Title: Biodegradable Packaging that Detects Food Spoilage and Rot- Logbook

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November 20, 2025	Project plan up to end of January completed. No research done.	N/A	Finish all research by Nov 28, following plan
November 22, 2025	Went over research and continued research part.	N/A	N/A
November 24, 2025	What is pH? What is Ammonia? Both completely researched and written (First draft)	N/A	N/A
November 27, 2025	Cited some citation in APA format Bacterial action	N/A	N/A
November 29, 2025	Research was continued and APA has been started formatting	N/A	N/A

Title: Biodegradable Cellophane that Detects Food Spoilage and Rot- Logbook

Name: Mariam - Grade: 8 - Renert School

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November 30, 2025	Basic intro to project on CYSF platform as well as ethics due care	CYSF Platform	N/A
December 3, 2025	Bioplastic and biodegradability, as well as spoilage process of specific food products.	APA citation on separate document, and APA citation generator.	N/A
December 4, 2025	Film composition and causes of spoilage researched.	Docs, and citations on separate documents	N/A
December 5, 2025	Health risks by food spoilage researched, diseases and illnesses. Accuracy of natural indicators.	Food prep, docs, citation doc, APA generator (MyBib)	Research <u>MUST</u> be completed by next week .
December 6, 2025	Revision over completed research paragraphs	N/A	N/A

Title: Biodegradable Packaging that Detects Food Spoilage and Rot- Logbook

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December 10, 2025	Emailed mentor, received signed parent contract	N/A	Waiting for Response
December 12, 2025	Paragraph formatted ph research, and campylobacteriosis paragraph, emailed mentor again	N/A	Check meeting date with mentor (Dr.B) Tuesday Lunch?
December 15, 2025	Worked on research	N/A	N/A
December 17, 2025	Paragraph formatted few research questions	N/A	Mentor meeting date tomorrow

Title: Biodegradable Packaging that Detects Food Spoilage and Rot- Logbook

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December 18, 2025	Met with mentor (Dr.B) Gave research fixes and procedure feedbacks	Dr.B	Find tentative schedule for meetings after winter break
December 19, 2025	Instructions given during class. Materials ordered from amazon	N/A	Should receive materials by approx. Monday-Tuesday
December 21, 2025	Most amazon product came (ammonia strips remaining). Research fixes and paragraph format, Google graph sheets created for data intake	N/A	Ammonia strips receiving tuesday.

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December 22, 2025	Created cellophane and indicator. Project set up in basement. Bought items from sobeys.	N/A	Items from sobeys: Cucumbers, milk, turkey, red cabbage, pipette
December 23, 2025	Second set of indicator cellophane. Finished one research question.	Docs	Cellophane should dry in 2 days
December 24, 2025	Cut dried cellophane. Worked on completing research	N/A	Waiting for second batch to dry
December 25, 2025	First cellophane trial tested w various foods and liquids.	N/A	Waiting for results. After result to ensure cellophane work, if it works will move onto big project, if it doesnt next trial will start

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December 26, 2025	More indicator was made, second trial of cellophane	N/A	Wait for 2nd trial to dry, keep notes on errors and trials
December 27, 2025	Project change: 2 full observation with dif. trials Cut up second trial example cellophane Started cellophane trial 1 actual observation testing, will run for 15 days.	N/A	Tomorrow make second full batch of trial 2 cellophane and complete all research MUST. All citations in APA format, and start procedure from notes, confirm google sheet to ensure all observations are taken correctly.
December 28, 2025	First observation collection date, ordered stuff for second trial.	NA	N/A
December 29, 2025	Second day observations collected. Worked on research, complete all variables. Made cell #2.	NA	N/A

Title: Biodegradable Packaging that Detects Food Spoilage and Rot- Logbook

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December 30, 2025	Reset experiment. Wrote research.	N/A	N/A
December 31, 2025	Finished all of research, acknowledgements, ad citations	N/A	N/A
January 1, 2026	Edited research. Finished day 2 observations. Almost done hypothesis. Cut up trial 2 cellophane.	N/A	Set tentative schedule w Dr. B. Set up for 2nd trial tomorrow. Maybe shortern outside day observation.
January 2, 2026	Day 3 observations.	N/A	N/A

Title: Biodegradable Packaging that Detects Food Spoilage and Rot- Logbook

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January 3, 2026	Day 4 observations, and planning for paragraphs	N/A	Ensure planning for paragraphs done.
January 4, 2026	Day 5 observations, and a procedure paragraphs. Cleaned out fridge trial 1 cellophane	N/A	N/A
January 5, 2026	Took observations and finished procedure and all research.	N/A	N/A
January 6, 2026	Observations taken, made plan to complete paper on time.	N/A	N/A

Title: Biodegradable Packaging that Detects Food Spoilage and Rot- Logbook

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January 7, 2026	Observations taken. Sources of error paragraph done. Hypothesis completed.	Docs, Gmail	N/A
January 8, 2026	Worked on slideshow presentation. Finished presentation. Skipped observations for day.	N/A	Book meeting with mentor - VERY important
January 9, 2026	Presented slideshow presentation for teacher feedback. Observations taken. Cleaned up outfridge trial 2.	N/A	Received feedback, incorporate and use to edit slides

Title: Biodegradable Packaging that Detects Food Spoilage and Rot- Logbook

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January 10, 2026	Observations taken and ensured all graphs right format.	Google Sheets	N/A
January 11, 2026	Skipped day of observations. Started application.	N/A	N/A
January 12, 2026	Observations taken.	N/A	Check whether mentor responded to email??
January 13, 2026	Skipped observations, Started observations written part	N/A	Save all images into USB with labelled
January 14, 2026	Continued observations written part and took observations daily.	N/A	N/A

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January 15, 2026	Observations taken, application work	Docs	N/A
January 16, 2026	Observations taken, APA citations edited	N/A	Completion of other paragraphs, remaining - analysis, observations, and conclusion
January 18, 2026	Close to end observations taken	N/A	Meeting booked with mentor (Thursday lunch)
January 19, 2026	Observations taken	N/A	All paragraphs complete except 3
January 20, 2026	Wrote 2 observation paragraphs, did end observations	N/A	N/A

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January 21, 2026	Observations taken. Worked on 2 paragraphs in observation section.	NA	N/A
January 22, 2026	Met with mentor (Dr.B), gave advice on slideshow and graph representation.	Dr.B, google slides, docs	Find another time next week, send email to book
January 23, 2026	Worked on paper - specifically analysis and continued on observations	Google docs	Mentor- sick- find another time before due date
January 24, 2026	Worked on observations and analysis paper, updated logbook	N/A	N/A

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January 25, 2026	Observations working, went over other paragraphs completed.	Google docs.	N/A
January 27, 2026	Worked on last few observations paragraphs for paper	Google docs.	Check in with mentor First paper due soon - Feb 3
January 28, 2026	Finished observations paper section.	Google docs.	N/A
January 30, 2026	Worked on analysis writing	Google docs.	N/A
January 31, 2026	N/A	N/A	

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Feburary 1, 2026	Finished analysis and read over	Docs	NA
Feburary 2, 2026	Final review over paper. Editing first draft completed.	Docs	Send final draft to mentor for following feedback
Feburary 3, 2026	Completed and submitted first draft of paper.	Docs and schoology	Ensure mentor looks through and gives feedback at least two times.
Feburary 5, 2026	Edited slideshow presentation	N/A	N/A
Feburary 6, 2026	Started saving images on USB	N/A	N/A

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February 7,2026	Went over own paper, reviewed.	N/A	Start working on graphs and interperatation.
February 8,2026	N/A	N/A	N/A
February 9,2026	Ensured all raw graph data was in proper format	Sheets, Links	N/A
February 10,2026	Sent follow up email with mentor.	Gmail	N/A
February 11,2026	N/A	N/A	N/A

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February 12,2026	Edited slideshow with already given feedback.	Google slides	N/A
February 13,2026	Completed reading declarations.	CYSF platform	N/A
February 14,2026	Submitted banner and project picture image	CYSF platform	N/A
February 15,2026	N/A	N/A	N/A
February 16,2026	Continued sorting photos of observations into files	USB, Photos	N/A

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February 17,2026	Email sent to mentor. Starting editing paper-individually.	Documents, Gmail	Check response for email, editing needed for paper.
February 18,2026	Image document and file saving, went over part of paper	N/A	N/A
February 19,2026	Reformatted some of digital copy of paper.	Documents, slides	Due date coming up soon. March 4
February 20,2026	Printed physical copy of paper (64 pages). Hand edited first 10 pages	N/A	N/A
February 21,2026	Continued editing physical copy of paper. Next 10 pages	N/A	Start implicating written feedback.

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February 22,2026	Saved some images on USB	N/A	N/A
February 23,2026	N/A	N/A	N/A
February 24,2026	Updated logbook, sent email to Dr.B for another meeting and paper review	Gmail, Sheets	Check email- response?? Take picture - put on platform Video tape slideshow after last edit
February 25,2026	Graph ideas and numbers, asked mentor for graph type opinion	Sheets	N/A
February 26,2026	Mentor started editing paper, feedback edited	N/A	Find different editor.

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February 27,2026	Worked on graph set up and color.	Word, Sheets	N/A
February 28,2026	Edited final slideshow	N/A	Film presentation before March 3
March 1,2026	Copied written paragraphs from documents onto platform. Updated logbook. Edited paper from mentor	CYSF, Docs	Film presentation tomorrow.
March 2,2026	Filmed slideshow presentation-submitted link on platform	Youtube, CYSF	Final due date - March 4
March 3, 2026	Everything completed submitted, poster preparing and presentation	CYSF platform	Final due date - tomorrow <u>March 4</u>

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March 4, 2026	FINAL PROJECT DATE. Went over and reviewed all paragraphs and document completion on platform.	CYSF platform	N/A

