



Dear Students and Parents,

We are pleased to announce the details of our exciting Science Fair for grade 5-8 students! Attached is the Science Fair Project Outline, which contains a schedule of important due dates and information regarding your child's Science Fair project.

The Science Fair Project is divided into manageable components: data collection, log books, research paper, display board, an in-class presentation and Science Fair judging. Students will receive ongoing support, dialogue and feedback from their Science teacher throughout the Science Fair process.

For Grades 5-6 final presentations will take place in class and students will have the opportunity to speak with judges about their projects during the Science Fair. Students in these grades will receive informal feedback from our independent guest judges.

For students in grades 7-8, final presentations will take place in class and students will formally participate in the Science Fair. They will be judged by our independent guest judges and receive feedback to learn more about the ways in which their Science Fair project connects and supports the Scientific Method.

The primary objective of this project is to support students in approaching a problem scientifically. This includes:

1. Asking questions and forming hypotheses
2. Creating experiments to test those hypotheses
3. Organizing data and drawing conclusions
4. Writing about scientific research

The project must be *experimental* in nature, as opposed to research oriented. In other words, students must do a test, survey, or experiment to determine an answer or conclusion to their question or hypothesis. We encourage students to select topics that they are genuinely interested in in order to maximize their engagement and learning. Topics must also be original; something students do not already know.

We are looking forward to working together with you to make the Science Fair a rich and engaging learning experience.

Sincerely,

Science Fair Team



Science Fair @ GAA

We are excited to announce the return of the annual GAA Science Fair!

Students in grades 5-8 will be participating in this authentic, investigation-based assignment that allows students to demonstrate a wide variety of skills including, research, inquiry, data collection and analysis, public speaking and of course, imagination!

Science Fair: How it works

The Science Fair is divided into manageable components: data collection, log books, research paper, display board, an in-class presentation and Science Fair judging.

Students will receive ongoing support, dialogue and feedback from their Science teacher throughout the Science Fair process.

Due Dates:

Question & Hypothesis: January 25, 2019

Your question and hypothesis must be submitted by January 25, along with a brief outline explaining the rationale for your topic choice, your hypothesis and your experiment outline, according to the *Scientific Method*. Your project must be approved by your teacher.

Progress Report Log Book: February 8, 2019

The progress report is made up of a minimum of 5 log book observations or entries, to be assessed by your teacher. Grade 5 & 6 students will be provided with a science fair journal/notebook to log their entries. Grade 7 & 8 students will be provided access to an online journal to log and share their entries.

Activities related to your project are to be recorded in your log book. Entries can include diagrams, photos and any observed data you may already have. Don't forget, experimental failures, null or undesired results should also be logged. Unwanted results can help you achieve desired results – learn from your mistakes!

Data Analysis: Week of February 11-15, 2019

As part of their Science Fair project, students will conduct data analysis, which includes inputting data in the appropriate graphing materials and displays as well as data interpretation. The Data Analysis will be used by students to inform their Science Fair Conclusions. Students may request teacher support and feedback for this Data Analysis process throughout the week of February 11-15.

Research Paper: February 28, 2019

All students are required to write a research paper based on their findings. Students are welcome to schedule brief feedback/review sessions regarding their Research Paper with their Science teacher, by appointment. The Research Paper should include how each of the components of the Scientific Method apply to the Science Fair project, should be 1.5-2 pages double spaced, in font size 12. Grades 7 & 8 students will also be required to submit a *Works Cited* along with their Research Paper.

Display Board & In Class Presentation: February 28, 2019

Students have the option to assemble their Science Fair display boards in class on February 27, 2019. In class presentations will take place on February 28 with your Science teacher. Students should have practised their presentation and should not be reading the data on their display boards.

Science Fair: March 1, 2019

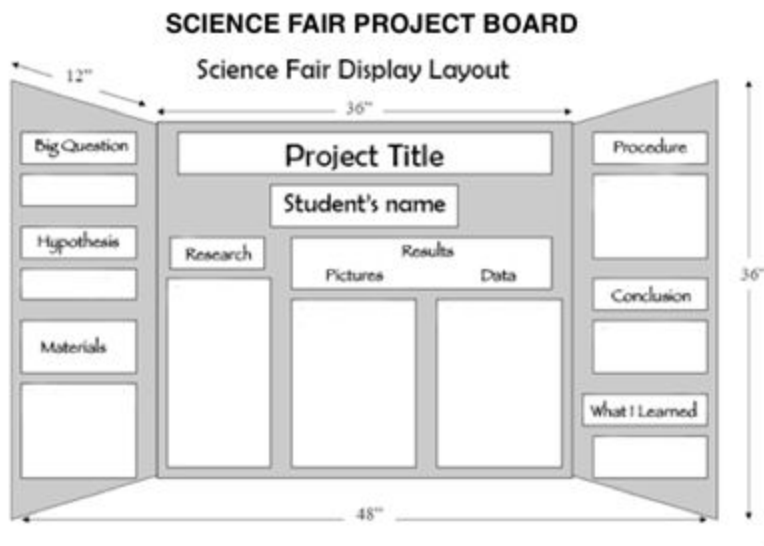
Data has been collected and analyzed, logbooks have been submitted, and the research paper and presentation are complete. On Science Fair day, students have the opportunity to share their hard work with their peers and a select group of expert judges from the school community. Parents are welcome to attend and view our collection of budding and creative scientists!

Science Fair Guidelines

- The subject for this year's science fair is open – find a topic that interests you and you will have more fun doing the project.
- No animals unless pre-approved by your teacher.
- Open flames will not be permitted during the science fair.
- Your science project must follow the *Scientific Method* outlined on teacher websites and reviewed in class.
- Each student must maintain continued entries in a log book about their project.

Science Fair Project Board Requirements

- Science Fair project boards are to follow the following layout:
 - Title of your project is clear and easily distinguishable from all other text. Text should be typed or neatly handwritten.
 - Visuals should be neatly hand drawn, computer generated or photographed by the student.
 - The following items must be clearly identified on your project board with subtitles:
 - Question and Hypothesis*
 - Materials*
 - Procedure*
 - Observation*
 - Data*
 - Conclusion*
- Due to limited space, each student will be permitted an area of 1m x 2m to present their project. If more space is needed, consult with your teacher *PRIOR* to the Science Fair Date.
- Tablets and Computers are permitted to show parts or all of your experiment; especially parts of your procedure that would not be feasible to perform during the science fair.
- Students must present a balance of qualitative and quantitative data.
- Late projects will be penalized 5% per day.
- The Science Fair Project is worth 5% of the total Science Grade.



Science Fair Rubric Name:

Grade: /100

FINAL MARKS BREAKDOWN

| Science Fair Element | Teacher Feedback | Grade |
|-------------------------------|------------------|-------|
| Question & Hypothesis [5%] | | |
| Log Book Total [20%] | | |
| Log Book (Progress Report) | | |
| Log Book (Final Log Book) | | |
| Oral Presentation [35%] | | |
| Display Board [15%] | | |
| Research paper [25%] | | |
| Final Mark | | |