

4th April 2024



Dear Parents

STEAM Innovations Fair/Science Fair

As twenty-first-century citizens, our students will need to make some of the toughest decisions of any generation in relation to sustainability, and their understanding of emerging science and technological issues is critical. As Science, Technology and Engineering have now become essential skills expected by employers, we encourage our students to participate in the Science and Technology/STEAM Fair, where they are required to apply these skills.

For many students at Somerville, the STEAM Innovations Fair provides a platform outside of the confines of the classroom to explore an area of interest. Using an authentic context, these students will have the opportunity to put the scientific inquiry and other investigative and engineering skills, which they have developed in the specialist science and classroom programmes, into practice.

This year the STEAM Innovations Fair will once again be compulsory for all students in Year 8 Literacy Extension classes and will run as an enrichment and advancement programme. Although it is optional for everyone else, we would like to see as many students as possible taking up this amazing opportunity.

Aims of STEAM Innovations Fair

For the students to participate in a scientific inquiry/engineering design process, using skills such as:

- engaging in science
- solving a problem relating to real-world issues
- predicting
- following the scientific method and/or following the technological/engineering process
- fair testing/classifying and identifying/pattern seeking/exploring/modelling/inventing/designing
- controlling variables
- researching
- gathering and interpreting data
- using and critiquing evidence
- communicating ideas
- using scientific language and symbols
- thinking in scientific ways
- presenting
- managing self

Parent Involvement

This is the student's project and we do not expect you to have to spend your time on it. Your child would value and benefit from your support during this amazing learning journey they are undertaking. A Science Fair Parent Information Evening will be held at school on Wednesday, 15th May (Term 2, Week 3) at 7:00 pm in the Staffroom. Please feel free to come along and hear more about this process and to ask/discuss any questions you may have.

Support at School

Mrs. McKenzie, Mrs. van As and Mrs Duffield will provide support during lunchtimes and some afternoons. These conferencing sessions will help students manage the process and provide opportunities to ask questions. Mrs Mackereth will also be available to conference with the Year 8 Literacy extension students and classroom teachers will also offer assistance, as needed.

Meetings will be held in the Science Lab in weeks 10 and 11 of Term 1 for students who think they would like to undertake a STEAM Innovations project. The most important first step is to decide on a topic. This is done by either asking a question they want to find the answer to or identifying a problem they want to develop a solution for. Ideally, they should have decided what it is they would like to investigate by the end of the April school holidays.

STEAM Innovations Fair Guideline Booklet:

Students will be given a detailed outline of expectations and due dates to ensure that they organise themselves. This is a step-by-step guide that will be monitored to ensure that students are managing their time properly. Classroom teachers will show some flexibility as far as homework goes over the time when the student has deadlines to meet for their Science/STEAM Innovations Project.

The projects need to be handed in and displayed in the back of the PAC on Tuesday, 23rd July (Term 3 Week 1). A number of projects will be selected to go through to the NIWA South and East Auckland STEM Fair later on.

All students have the option of doing either a Scientific Investigation by following the Scientific Inquiry Process, or an innovation/invention by following the Engineering Design Process.

Display Boards:

These need to be purchased by the students from any stationery store that stocks them.

If you have any queries, please do not hesitate to contact: Mrs McKenzie at tmckenzie@somint.school.nz

If your child is considering undertaking this journey, please complete the reply slip and return it to Mrs. McKenzie by Friday, 10th May (Term 2 Week 2).

Yours sincerely

Tina McKenzie
Science/STEAM Curriculum Leader

Science/STEAM Innovations Fair Entry Form

My child, _____ in Rm _____ will be undertaking a Science/STEAM Innovations Fair Project. I am aware that this is an extension and advancement programme and investigations will not be undertaken during class time. I will offer assistance and support to my child as required. I will also ensure that my child follows all the guidelines and deadlines and hands in a completed project on the due date.

I will / will not (Please circle) be able to attend the Parent Information Evening at school on Wednesday 15th of May at 7:00 pm in the Staffroom.

Name: _____

Signature _____

Contact No: _____