



SCIENCE FAIR

EBUS SCIENCE FAIR 2020

For EBUS students in Grades 4 – 12

Friday Feb 7, 2020

Location: VIRTUAL

Information Below

SIGN UP HERE

WHEN / WHERE

The EBUS Science Fair will be held online on **Friday Feb 7th, 2020**. All full-time EBUS Academy students in grades 4-12 can participate.

Some students may be selected to carry-on to the **SD91 District Science Fair on Wed Feb 19th, 2020**. The district science fair is held locally in Fraser Lake; however, we will explore ways for students who do not live locally to participate through technology.

IMPORTANT DATES:

- **Virtual Info Session:** Fri Jan 10th 10:00 am – 12:00 pm (link below)
- **Ethics Forms***: Due Mon, Jan 27, 2020
- **EBUS Science Fair:** Friday Feb 7, 2020

**Ethics forms are only required for experiments involving humans or animals.*

WHY PARTICIPATE

Science Fairs offer students the opportunity to create original scientific research, innovative projects and develop 21st Century learning skills; critical and creative thinking, collaboration and communication. Projects can be displayed at various levels of competition: school, district, regional, national and international. Students can explore scientific inquiry and have fun showing their learning!

There are two types of projects that students can do: an Experimental Project or a Non-Experimental (Demonstration) Project.

HELP SESSIONS

To help you get started, there will be an info session on Friday Jan 10th. All other dates will be drop-in session where students (and parents) are welcome to pop in for help or to discuss their progress.

The link is the same for all sessions: <https://us.bbcollab.com/guest/5e46a7d850144f39a458ce4d9a795005>

Fri Jan 10th 10:00 am – 12:00 noon	Info Session: important info and an overview of how to carry out an experiment
Fri Jan 17th 1:00 – 3:00 pm	Drop-in help session
Fri Jan 24th 10:00 am – 12:00 noon	Drop-in help session

Fri Jan 31st 10:00 am – 12:00 noon	Drop-in help session
--	----------------------

TYPES OF PROJECTS

There are two types of projects that students can do in Science Fair: *Experimental Projects* or *Non-Experimental Projects*. Both types of projects are a great way to explore science!

EXPERIMENTAL PROJECTS

An experiment involves conducting an investigation to test a scientific hypothesis by the experimental method. Students will choose at least one variable to change (independent variable) and any other variables are controlled. Students can design their own original experiment or follow one that they find online. Students will document data and observations as they conduct their experiment. At the end, they will analyze their results and draw conclusions.

In this category, we also include scientific studies. In this instance, the variables, because of their nature, may not be possible to control. Therefore, instead of experimenting, the student would collect and analyze data to make meaningful correlations to reveal evidence to prove or disprove their hypothesis.

Experiments (and Scientific Studies) have the following components:

- Purpose/inquiry question
- Background research
- A hypothesis (a prediction of what will happen)
- Summary of experimental procedure
- Data and observations
- Results (analyzing data)
- Conclusion
- References (bibliography)

NON-EXPERIMENTAL PROJECTS

A non-experimental project or demonstration-only project is one which does not test a hypothesis or use an experiment. Such projects typically are ones in which students gather and organize scientific information or objects to present or display. Projects in this category include demonstration of a scientific principle, making and testing a scientific model, demonstrating and application or improvement of existing technology.

PRESENTING YOUR PROJECT

On the day of the EBUS science fair, students give an oral presentation of their project using v-class to a panel of judges (EBUS teachers). **Students will display their project in one of two ways: a PowerPoint presentation or a display board.** Since this is a virtual fair, either option is acceptable.

If using a display board, the exhibit dimensions must be no larger than must be no larger than: Width 1.2 m/ Depth 0.8 m/ Height is limited to 3.5 m.

**A standard display board (sold at Staples) is W: 1.2 m/ D: 0.6 m/ H: 1 m.

Presentation Displays must include:

1. Name, Grade and Project Title (Large, Clear and Neat!)
2. Introduction and Purpose
3. Hypothesis or Question
4. Materials and Procedure (list all materials and steps)
5. Data: measurements/ what you found in tables (and graphs if possible)
6. Results: averaged data and an explanation of the data (use tables, charts, graphs)
7. Conclusion
 - a. Short summary of results
 - b. Was your hypothesis supported or disproved?
 - c. What would you change or do differently next time?
8. Pictures (if possible!)
9. References: list any sources that you used (books, websites)
10. Log Book: include background research, notes, observations, any forms (i.e: ethics forms)

Students are expected to give an oral presentation to explain their project to EBUS judges. To the level appropriate for their grade, students should be prepared to answer the following prompts:

- What is the purpose of your project and what questions are you trying to answer?
- Tell us about your hypothesis and how you tested it?
- What variables did you manipulate and which variables remained consistent?
- What research did you carry out? Tell us about your data and results.
- Tell us about your analysis of the data and how it relates to your conclusion.
- What did you learn in this process and what would you do differently?
- What are some real life applications related to your project?
- What new questions were generated from your project?
- Who helped you?

RESOURCES:

Here are some great websites to get ideas and to help design and present your project:

- [Making a Science Fair Display](#)
- [Science Fair Project Ideas](#)
- [Smarter Science](#)

PROJECTS REQUIRING ETHICS APPROVAL

Any projects involving **humans or animals** must make application to the Ethics Committee before conducting the experiment. Ethics forms are found on the SD91 website [HERE](#).

Ethics forms must be completed and emailed to sciencefair@sd91.bc.ca or mboniface@sd91.bc.ca by January 27th. EBUS will send along the forms to the Ethics Committee. **Remember DO NO HARM!!**

Questions?

Email sciencefair@sd91.bc.ca or mboniface@sd91.bc.ca.

Don't forget to sign up right away!

SIGN UP HERE