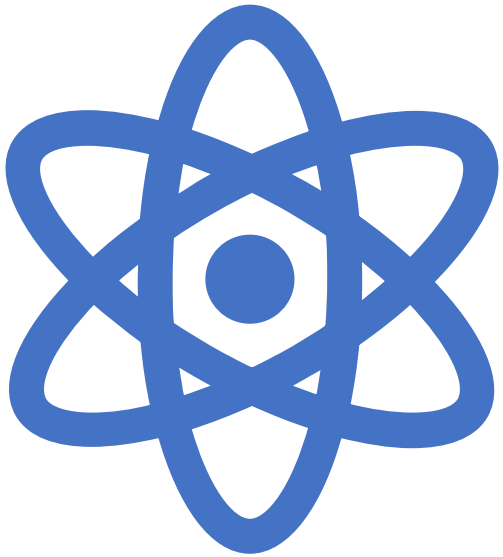


Regional Science/STEM Fair Season

Judges Information, Orientation, & Guidelines

Session outline

Welcome

Orientation to the judging process & forms

Reminders around providing constructive feedback

Impact of Science/STEM Fairs on students

Welcome!

Key components in the Fair

1

Review student submissions before your interview slot

2

Attend a 15-20 minute interview with each student about their project

3

Provide supportive feedback to students on their project using the scoring sheet

Judging philosophy

- Many students have been working hard for many months in preparation for this fair, and they will find their discussions with you to be a highlight of the fair
- Many students look up to their judges as role models
- While this is a competitive science fair, our first priority is that all students have a positive judging experience
- Your role as a judge is not only to evaluate the merit of various projects, but also to provide helpful, constructive feedback as an expert in your field

Projects may be one of three types

1. **Experiment:** An investigation undertaken to test a scientific hypothesis using experiments
    - Experimental variables, if identified, are controlled to some extent
2. **Innovation:** The development and evaluation of innovative devices, models or techniques, or approaches in technology, engineering or computers (hardware or software)
3. **Study:** A collection and analysis of data to reveal evidence of a fact or a situation of scientific interest
    - It could include a study of cause and effect relationships or theoretical investigations of scientific data

- The judging criteria will vary slightly depending on the type of project

Judging criteria

- The projects will be evaluated based on three major criteria: scientific thought, creativity & originality, and communication
- The most weight is given to scientific thought and original creativity
- The project display and presentation are important in that they should demonstrate the student's ability to communicate concepts, methods, and results relevant to the work presented
- These judging criteria are derived from the same criteria applied to the Canada-wide science fair

Three key criteria for projects

- **Scientific thought (50%):** The judges will evaluate the scientific thought in the design, the procedures and the analysis of the experiments, data and/or innovation
- **Creativity (33%):** The judges will evaluate if the project shows a novel approach and use creativity in its design
- **Communication (17%):** Communication is evaluated based on four components: the visual display, the oral presentation, the project report with background research and the logbook

Review student submissions

- Review the e-mail you would have received with a link to the different projects you will be responsible for adjudicating and reviewing
- In preparation for the next steps, review the **5-minute video** and **report** submitted for the project
    - This may be helpful in generating questions to ask during the next stage – the interview

The interview process – first steps

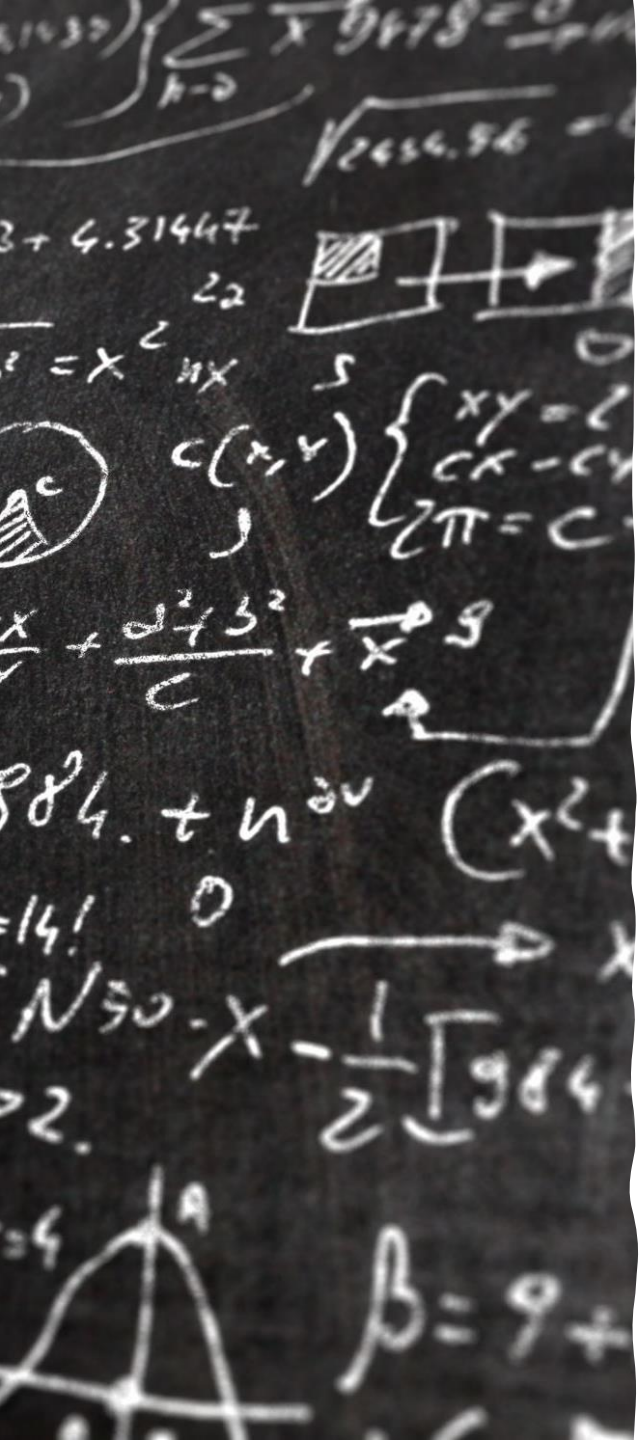
- Introduce yourself and ask each student to do the same
- Allow the student two (2) minutes to explain the project
- Ascertain, through questioning, the student's contribution to and knowledge of the project
    - Physical/digital display is secondary to the student's knowledge and understanding

The interview process - questioning

- Pose all questions in a conversational manner
- Even if you experience a sense of dismay at a project, be careful not to convey this to the student via tone of voice, body language, or lack of attention
- You may wish to give verbal feedback to the student during the interview
    - Note this on the judging form; be sure that it is shared in a positive and encouraging way

The interview – closing

As the conversation and discussion comes to a close, be sure to thank the student



Providing feedback to students

- At all times, it is important to keep in mind the intended audience for your feedback – the students and youth involved in the STEM/Science Fair
- Remember that your feedback will be sent to the student after the Fair
- Therefore, all feedback **must** be constructive, supportive, and encouraging
    - For example: Rather than “You should have done this …”, use “For your next project, consider doing …”

Different models for providing supportive feedback

- You may wish to use the Glow and Grow model or Feedback Sandwich model for providing feedback on each of the criteria for the project
    - Glow and Grow model: One item where the project was glowing, and one item where the project can grow
    - Feedback Sandwich: One item that was done well with the project, one constructive feedback on an aspect of that project that could be done differently, and ending on one aspect of the project that should be continued
- In all instances, please acknowledge what was done well and provide constructive suggestions for improvement or future work

Frequently Asked Questions

How do I differentiate my evaluation for students who worked with a mentors in a university lab versus students who did everything at home?

What if I am not an expert on the topic?

Can I judge more projects than I am assigned?

What if I have a conflict of interest for a project I am assigned to judge?

Thank you!

Questions? Comments?

- Connect with Gerry if you have any questions about the judging process, providing supportive student feedback, or other aspects related to your role as judge
- E-mail: gerry@sciencefairs.ca