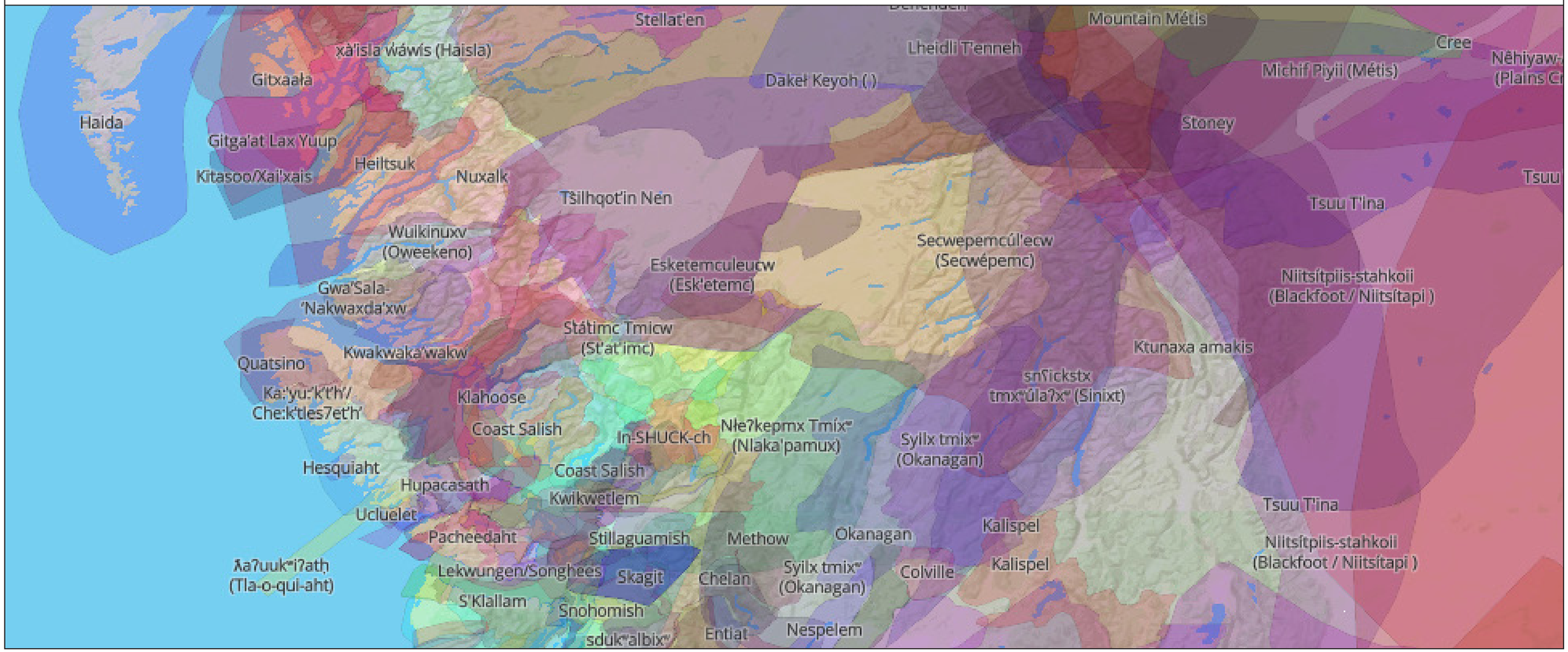
Communication: Reports, Presentations, Interviews

A Science Fair Foundation BC

STEM Workshop

Territory Acknowledgments

Find out more about the traditional territories of BC at www.native-land.ca



The Scientific Method

1. Ask a Question
2. Do Some Research
3. Make a Hypothesis / State your Objective
4. Test Your Hypothesis / Objective
5. Analyze Your Results & Form a Conclusion
6. **Tell Others About it!**

Science Communication

WHY DO WE NEED TO DO REPORTS, PRESENTATIONS AND INTERVIEWS?

The forms of science communication you're required to do for your STEM fair are based on what professional scientists and engineers are required to do when presenting their studies or findings to the scientific community and general audiences.

They help others:

- replicate our projects and confirm our results
- increase our collective knowledge as a community
- build on our projects and make new advancements based on the information we discovered

The Project Report

WHAT IS IT?

- The project report is a written document that summarizes everything you did and learned during your entire project
- The purpose of the project report is to tell others about the major findings of your project
- Your goal when writing your project report is to be as clear as possible in the fewest possible words

The Project Report

THINGS TO KEEP IN MIND

- The report is a summary, not an in-depth description
- Include only what is most important and relevant — keep it concise
- Get right to the heart of your message
- Be mindful of word count or page limits
- Technical requirements for your report will be different for each fair so be sure to check with your local fair before starting on your project report

The Project Report

COMPONENTS OF A PROJECT REPORT

The Setup

- Introduction - How did you come up with this idea?
- Background Information - What has been done on this topic before?
- Hypothesis - What is your prediction?

The Climax

- Procedure/Method - How did you go about answering your hypothesis?
- Data Analysis/Discussion - What information did you get from your procedure and what does it mean? How does it relate back to your hypothesis?

The Conclusion

- Conclusion - What did you find out?
- Ideas for Future Research - What will you do next?
- Acknowledgements - Did anyone help you?
- Bibliography - What source material helped you in your project?

The Project Report

TIPS FOR WRITING YOUR PROJECT REPORT

- Make it an iterative process
- Read your report out loud
- Have others read your report and give you feedback
- Not sure if you should remove a sentence? Ask yourself: "If this sentence was not here, would it change the overall message of my report?"

The Presentation and Display

YOUR PRESENTATION

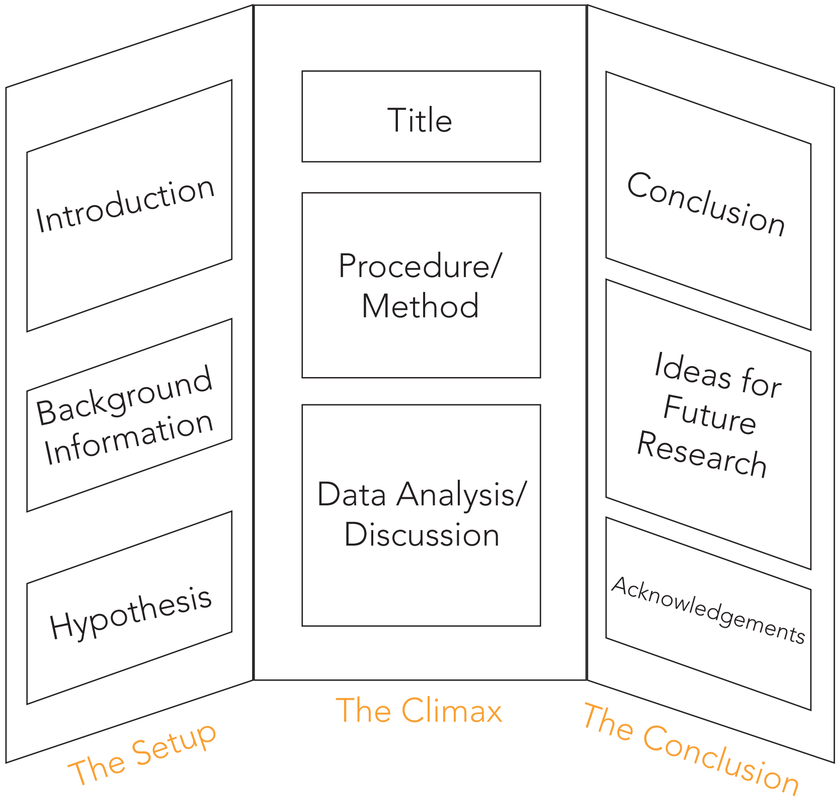
- Showcase your project and all of your hard work
- Sell your narrative
- Show your personality and enthusiasm
- Think about your audience and their different scientific backgrounds

The Presentation and Display

TIPS FOR YOUR PRESENTATION

- Write out your presentation script beforehand
- When writing your script, 130 words is roughly 1 minute when speaking
- Practice in front of the mirror or to your parents or friends
- Record your presentation and watch it yourself before submitting it
- If you are presenting virtually (live or recorded), have cue cards or speaking notes just off-screen or right beside the camera

The Presentation and Display



YOUR DISPLAY

- Organize your project display in a logical order using the same 3 components of your project report
- The first page is The Setup and includes your Introduction, Background Information, and Hypothesis
- The second page is The Climax and includes the Procedure/Method and the Data Analysis/Discussion
- The last page is The Conclusion and includes the Conclusion, Ideas for Future Research and Acknowledgements

Note: The items featured on this display are recommendations and suggestions. Be sure to check and adhere to any specific display requirements as outlined by your local STEM fair.

The Interview

THINGS TO KEEP IN MIND

- Be prepared to explain all parts of your project to your judges, whether they have a PhD in your topic or no background knowledge at all
- Judges do not ask you questions (even hard questions) to prove you wrong — they are trying to start a conversation around your topic
- Many judges will want to know how your project applies to the world around you
- Do not be afraid of talking about discrepancies or what went wrong in your project — this is often what judges want to hear about the most! They want to know how you responded to discrepancies in your project, and what you want to do next as a result of those discrepancies

The Interview

TIPS FOR YOUR INTERVIEW

- Practice answering questions from friends and family
- It is okay to take some time to think about a question before answering it

TIPS FOR VIRTUAL INTERVIEWS

- Think about the location of your microphone
- If you have visual aids, make sure the judges can see them clearly
- Try to be in a quiet place for your interview

Upcoming Programs

From Science Fair Foundation BC

Science Fair Foundation BC's

STEM Workshop

STEM Workshops

"What's a STEM Project?"
October 12th, 2021

"Why to How:
Understanding the Scientific Method"
November 9th, 2021

"Understanding Ethics & Safety"
December 7th, 2021

"What Does an Awesome STEM Project Look Like?"
January 18th, 2022

"Analyzing Your Results"
February 15th, 2022

"Communication:
Reports, Presentations, Interviews"
March 15th, 2022

Sweatin' for Science 2022 | Space Edition

Sweatin' for Science is Science Fair Foundation BC's annual fitness fundraiser to support youth across BC and the Yukon in their discovery of science, technology and innovation. Proceeds go towards making sure youth from all parts of the province and territory have equal access to STEM education. Pick your favourite activity, form a team with friends, and join us for the month of May when we start Sweatin' for Science.

- General registration is open. Get your tickets!

- Event dates: May 1 to May 30

- Win prizes for top distance and top fundraiser

- Go to www.sciencefairs.ca/sweatinforscience

Youth Innovation Showcase

Attention Young Innovators! The 2022 Youth Innovation Showcase is looking for youth from across BC and the Yukon who are working on the next STEM breakthrough. Innovations big and small are invited to register for this year's virtual competition by submitting a 45-second pitch video explaining your innovation. Finalists will pitch their ideas live to industry experts in November for a chance to win $5,000.

- Open to youth between 12 and 19 years old who live in BC or the Yukon

- Registration opens August 15, 2022

- 5 finalists from each age category

- Go to www.sciencefairs.ca/participate/yis/

Find out more at www.sciencefairs.ca, following us on social, or subscribing to our newsletter.