Science Fair Project 2021 Outline

As a student, you are learning about the scientific method and the development of a controlled experiment. It is your turn to be a scientist now, as you get the opportunity to explore a scientific question that has intrigued you.

Using the scientific method, **you are responsible to design, create and conduct a controlled experiment that answers a specific question**. You will then present your experiment and results in a school science fair. If you do well in the school science fair, you may have the opportunity to participate in a Yukon-wide virtual science fair with other young scientists from the Yukon. As a scientist, it is your chance to present your ideas and scientific reasoning to the world. You may be joining the ranks of Albert Einstein, Stephen Hawking and Bill Nye the Science Guy.

In order to have a successful science fair project, you will need to follow a timeline that has specific parts of your project due on certain days. You will be responsible to work at home in order to complete the different parts of the project, as your school time will be limited. As a result, please make sure that your project and experiment is well planned and that you follow the schedule as outlined below.

1. Generating an Idea and Planning

Student brainstorms possible topics/subjects. Student comes up with 2-4 (or more) questions that they want to investigate as part of their experiment. The topics and questions have to be checked by the teacher and parents.

due: _____

Student chooses a suitable topic and question.

due: _____

The student then forms a hypothesis (prediction) that they want to test in their experiment.

due: _____

Student designs an experiment that will test their hypothesis. The planned experiment needs to include a purpose, materials list, hypothesis, procedures list, and planned observations (tables, charts, graphs, etc.).

*** There is no specific due date for this part, but students are expected to show me their plan as soon as they possibly can. I will also check with the students to make sure that they are on schedule with their planning.

2. Experiment and Data Collection

Student conducts the experiment and collects data accurately. Student records all data and observations (ie. in a journal), and prepares a written conclusion supported by the data.

due: _____

3. Creating a Display

Student creates a display board following exhibit guidelines. The display board needs to:

- include the same information as the experiment report (purpose, materials, hypothesis, procedures, variables, observations, conclusion and researched info).

- have all material displayed in a clear, neat, and interesting manner so that it is easy to read and follow.

Pictures, tables/charts, and objects from the experiment are also highly recommended as part of the display. It makes it more interesting to see.

due: _____

4. Writing up an Experiment Report

Student prepares an experiment write up/report that includes the purpose, materials, hypothesis, procedures, variables, observations, conclusion, and researched information. The report can be hand printed or typed, and it needs to be neatly organized with headings and tables/charts.

due: _____

5. Exhibiting

The students will present their experiment and display to other students at the Jack Hulland Science Fair.

Jack Hulland School Science Fair*:* _____

A few experiments from each grade will be selected to attend the virtual regional science fair. Students and parents will be notified of the selection after the school fair.

Yukon Stikine Virtual Regional Science Fair: _____

Remember that there are no right or wrong answers in Science. You just need to plan a controlled experiment that investigates a question that intrigues you. If you follow the scientific method and outline above, you will successfully complete your science fair project. Don't worry, just enjoy the process. **HAPPY EXPERIMENTING!**

*** This project has a tight timeline, so please ensure that the student meets all of the deadlines and does not fall behind with the work. There will be some class time dedicated to the project, but the students will be required to organize and complete a lot of the work at home. If you have any questions, please contact me at home, or school, for any clarification about this project. Thank you for your support; I look forward to seeing some great experiments and interesting science.