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Name: _____

Date: _____

Following the class discussion on picking a topic, list 5 possible topics and then do a bit of research what will be needed i.e., how long it will take you – then see if it still interests you.

Topic 1: _____

Area of Science: _____

What you will need: _____

Suggested timeline: _____

Suggested Grade Level: _____

Rating (1-5): _____

Topic 2: _____

Area of Science: _____

What you will need: _____

Suggested timeline: _____

Suggested Grade Level: _____

Rating (1-5): _____

Topic 3: _____

Area of Science: _____

What you will need: _____

Suggested timeline: _____

Suggested Grade Level: _____

Rating (1-5): _____

Topic 4: _____

Area of Science: _____

What you will need: _____

Suggested timeline: _____

Suggested Grade Level: _____

Rating (1-5): _____

Topic 5: _____

Area of Science: _____

What you will need: _____

Suggested timeline: _____

Suggested Grade Level: _____

Rating (1-5): _____

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Student Name: _____

You have now chosen a topic. Please write it below.

_____

That is the most important of the many steps. The next is to figure out if you are doing an experiment, innovation or a study. We then will be forming a good question and making sure that it is original(ish).

Before this, however, you have to look at the evaluation process and the steps, all of this and more are on my Blog or you can also access it directly from the BASEF website (http://www.basef.ca/rulesjunior).

As stated before, you are to be recording your work and ALL of your resources for your bibliography and your work Student Science LogBook. It is also part of the evaluation at the school and BASEF level. A sample is given in the Science Success Student Workbook but is also on page 5 of this workbook.

You are to have read through Science Success Student Workbook as it will assist you greatly. Keep an electronic copy bookmarked or downloaded on a device or cloud (Google drive) for your frequent review.

Please check off that you have access to a copy and that you have started to read through it. If you have not, please ask a friend or your teacher – this is an important step.

I, _____ have access to the Science Success Student Workbook and have started reading it –

sign this line: _____

Today's Date: _____

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Bibliography Page Starter

Use this to record websites and other resources used. Add other pages as necessary.

Type of Source • Website • Book • Magazine • Online Article • Website • Person • Etc.	**Details** • Author • Date • Title • Pages • City of Publication • Publisher • Relation/contact info	**Notes about Content** What you learned.
1.		
2.		
3.		
4.		

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Science Logbook or Journal

In order to properly record what you do, you are to keep a Science Logbook or Science Journal (these are the same thing with different names).

Each time you work on your project, you should record what you do. This can be done in a notebook or a duo tang. We are going to use this Workbook. I am going to start you off with 4 pages and you are to put in your entries with the following: Date, What you did and any reflections. You may add details but this is a good way to look back at your wok and see if you can improve your work or find out what went wrong or right. The more detail, the better. When you are finished, just start the next entry below it starting with the date. Add more sheets if needed.

MY SCIENCE JOURNAL Name: _____

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BASEF Website Scavenger Hunt

Name: _____

The Bay Area Science and Engineering Fair (BASEF) Website is huge and has a wealth of information. Please take the time to fill in this Scavenger Hunt for information on the website. Follow the trail and look for the information.

Start at the Home screen basef.ca

1. What are the two headings at the top between HOME and SPONSORS

_____ _____

2. What News Item was posted on September 29, 2021? (Hint: It is very helpful.)

_____

3. Under the ABOUT tab, there is a subheading called IN A NUTSHELL, (Click on it), how much is awarded each year in cash, trips and scholarships? $_____

4. Click back to the Home Page and then hover over the GETTING STARTED heading. Click on the Getting Started – Junior (Grades 7/8) link. Scroll down to the Step by Step heading. The first step is Pick your topic. What are the two suggested links that will help?

_____ _____

You should bookmark these two resources. The handbook can be downloaded for reference. The second has many links that can be very useful. The handbook is a longer document and should probably not be printed. This handbook is a shortened version of the one online.

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Identifying Variables and Designing Investigations

Name: _____

As we go through the PowerPoint presentation as a class, fill in the information on this sheet.

What are the 3 types of variables?

Type of Variable	Definition or helpful information

In the Puzzle Experiment,

The Independent Variable is _____

The Dependent Variable is _____

The Controlled Variable(s) is(are)_____

_____

In the Electromagnetic System Investigation,

The Independent Variable is _____

The Dependent Variable is _____

The Controlled Variable(s) is(are)_____

_____

In the Egg Boil Investigation,

The Independent Variable is _____

The Dependent Variable is _____

The Controlled Variable(s) is(are)_____

_____

In the Pond Water Temperature Investigation,

The Independent Variable is _____

The Dependent Variable is _____

The Controlled Variable(s) is(are)_____

_____

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DESIGNING INVESTIGATIONS

In the Soap – Bubble Size Investigation,

The Independent Variable is _____

The Dependent Variable is _____

The Controlled Variable(s) is(are)_____

_____

What is being Changed by the Scientist? _____

_____

What will be Measured (and How)? _____

_____

In the Ball – Bounce Investigation,

The Independent Variable is _____

The Dependent Variable is _____

The Controlled Variable(s) is(are)_____

_____

What is being Changed by the Scientist? _____

_____

What will be Measured (and How)? _____

_____

Now, think of your own experiment or one that you would like to do and think through the variables and what you want to observe or record to see if your investigation proves your theory or hypothesis as to what you think will happen.

The Independent Variable is _____

The Dependent Variable is _____

The Controlled Variable(s) is(are)_____

_____

What is being Changed by you (the Scientist)? _____

_____

What will be Measured (and How)? _____

_____

What are possible things that can affect your results (possible sources of error)?

_____

_____

_____

_____

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Science Fair Experiments – General outline

NAME:_____

What things did you use? (**Materials)**:

What did you set up? (**Apparatus**):

What did you think was going to happen? (**Hypothesis**):

What did you do Step by Step? (**Procedure**):

1.

2.

3.

4.

5.

6.

What happened? (**Observations**)

Why do you think this happened? (**Conclusions**)

How can you make it better? (**Error Analysis** and **Ideas for Further experiments**)

Brief summary of what was done? (**Abstract)**

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The Written Report

The report you write is your way of communicating your work with your teacher, classmates, judges, and others who may come to the show. A sign of an excellent report is one that someone else could use to repeat your work. Your report needs to be clearly written, in a logical sequence, with all steps in your work clearly explained. Your written work should tell a story about your observations, and should include the following:

___ A title page with your project name and your name
___ An abstract of your work (see next page)
___ A table of contents
___ Introduction
___ Your question/problem statement, purpose, and hypothesis
___ Background information, written in your own words
___ Your procedure, including the materials list
___ Summaries of all experiments/tests you made
___ A summary of all data you collected*
___ Your conclusions about the results
___ Your discussion of the possible applications of your work
___ A reference list
___ Acknowledgements

Preparing an Abstract

An abstract, or summary of your work, is usually about 250 words long. A shorter summary of 50 words may be required as part of your registration for regional or national fairs. An abstract should include:

___ Title
___ Problem
___ Purpose of Project
___ Hypothesis
___ Procedure
___ Conclusions

Preparing a Reference List

Your reference list will be an alphabetical list of all the resources you used to complete your project. Only resources you quote or take ideas from go in this list. You will be able to easily create this list from your notes on page 8. If you wish, list other sources that you read for 'Background Reading' separately.

Use a page in your research logbook to prepare your project reference list. Visit www.wisc.edu/writing/AboutUs/TofC.html for tips for on APA, MLA and Chicago style.

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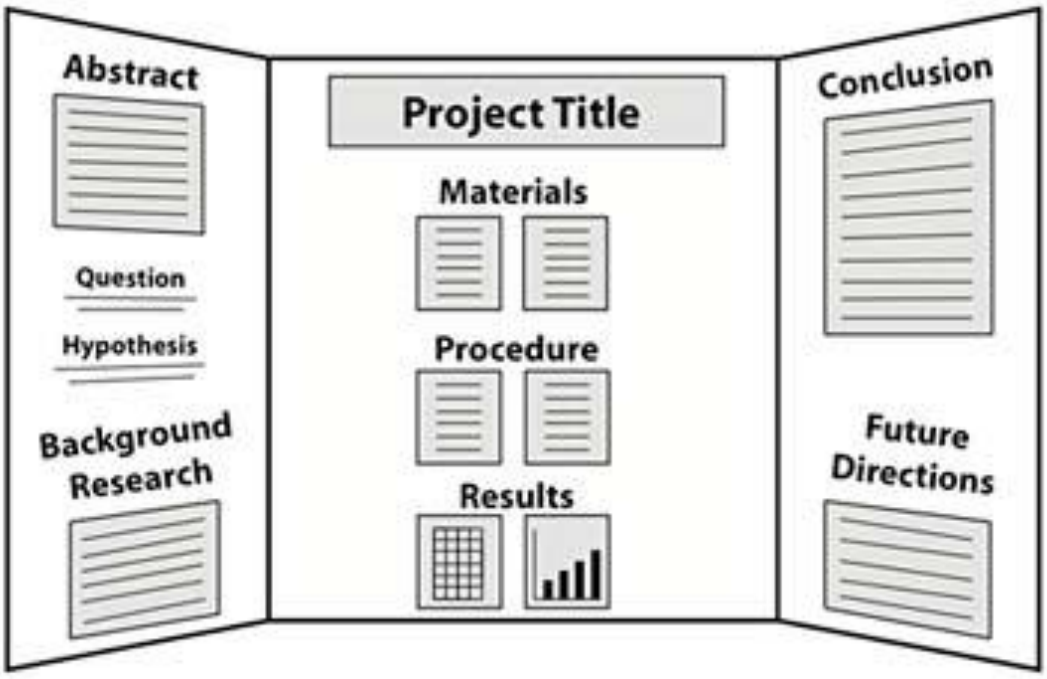
The Display Board

The purpose of your display is to communicate the summary of your work and results in an eye-catching manner. Your display information should not be the same as what is in your written report. Rather, it should be the highlights.

Items you must include:
_ Your question/problem statement
_ Your hypothesis
_ A summary of your results
_ The booklet of your written report
_ Your original logbook

Items you may include:
_ Graphs or charts summarizing your results
_ Models, drawings, photographs
_ Materials to demonstrate your project (if allowed under safety guidelines)

Don't include:
_ Other references such as books, website pages. You may include a summary of these in your own words.
_ Any substances on the prohibited list. Consider photographs instead.
_ Anything irreplaceable. Think carefully about security and possible damage before putting expensive equipment at your display.



https://eurekablogazine.files.wordpress.com/2015/02/project_display_displayboard_mockup.jpg thanks Fatemah