Science Fair Project Information

Student Name	Science Teacher	

What are the gains of completing a science fair project?

- Involves much more than just science
- Development of research skills, writing skills, math skills, computer skills, presentation skills
- Use of the scientific method-a process for solving a problem
- Inquiry, curiosity, creativity, organization
- Long duration of an assignment-Most Powerful Active Learning Experience
- Our society relies on science and technology-These skills will be needed in our future workforce.

Steps of the Scientific Method

- 1. Find a problem/Ask a question
- 2. Create a hypothesis (educated guess)
- 3. Complete an experiment to test your hypothesis
- 4. Collect data
- 5. Analyze data and determine results
- 6. Draw conclusions based on your results
- 7. Share results from your findings

Help Sessions

Thursday- October 24

Thursday- November 7

Overview of Assignment Due Dates 2019-2020

Friday, September 6	Topic Approved
Friday, September 20	Log Book Check 1

Friday, October 4 Research Plan & Bibliography (see directions)
Friday, October 11 Background Research Report/Log Book Check

Friday, November 1 Research Report due (follow directions outlined in handout)

Friday, November 8 Abstract due

Wednesday, November 13 Science projects due Tuesday, November 19 Science Fair Day

Below you will find instructions for completing each step of the science fair project.



Step 1___Due Friday, September 6, 2019

Topic			
Chosen			

The following website list 200 project choices that are excellent for completing a science fair project:

https://www.winter.k12.wi.us/community/sciencefair/sciencefairideas.pdf

- Select a topic that interests you, that is appropriate for your grade level, and meets the approval of you parents and science teacher.
- The topic must be testable through an experiment or survey.
- Topic must be approved by teacher before beginning your project.
- Do not do a project that has been done over and over.
- Be original.
- Choose a topic that can be finished in the amount of time given and that you can complete with materials available to you.



- The first log book check will be to make sure all students have a log book. Below is an image of a correct log book.
- You log book is to contain accurate and detailed notes of everything you do for your research project.
- NO names are allowed in the log book.
- Only blue and black ink are allowed. No pencil.
- Pages cannot be removed from the log book.





- The next step is the research plan and bibliography.
- This information is to be included in the log book. Below is an outline that is to be completed in the log book.
- Your bibliography will be page 10 in your log book.

- The following information should be on a separate page in the log book in blue or black ink and dated.
- 1. Question/ you are looking to answer through the experiment.
- 2. Hypothesis-your guess as to the answer to the question.
- 3. Variables-Independent-what you are changing in your project.

 Dependent-what happens because of what your changed in your experiment
- 4. Materials
- 5. Data collected from your experiment
- 6. The results of your experiment
- 7. Your conclusion-was your hypothesis correct, what do you think about your experiment
- 8. Background Research-Explain why you chose this question or problem. What websites, books are resources did you use.
- 9. Acknowledgements-People who helped you with your project.
- 10. **Bibliography**/References-list all book and website you used.



Step 4___ Due Friday, October 11, 2019

- The next step is the Background Research Report. This a typed summary of your research plan and bibliography from your log book.
- This will become the introduction to your research paper.
- You will return to this document to begin your research paper using this summary as an introduction.



- This next step is Log Book Check 2.
- This log book check is to look for evidence of your research plan, bibliography, and collected data from experiments.

Composition

- No pencil.
- No torn out pages
- Blue or black ink only

- Step 6 Due Friday, November 8, 2019
- The next step is the Research Report.
- The Research Report is to be kept in a three ring binder and must be typed.
- The Report should include a title page and include a table of contents.
- Use 1 inch margins and 12 pt font (Times New Roman)
- Below is how the paper should be divided based on content. Each new section starts on a new page. This information is in your log book as part of your research plan.
 - o Title Page
 - Table of Contents
 - Introduction to Topic
 - Hypothesis
 - o Materials, Methods, Experiment
 - Results
 - Discussion (Discuss findings from your experiment)
 - Conclusion
 - Acknowledgements (Anyone who helped you with your project)
 - Bibliography-found in log book

Step 7____Due Wednesday, November 13, 2019

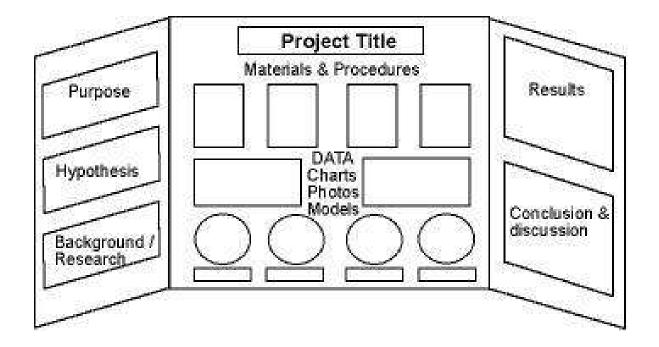
The next step is the Abstract. It must be typed.

- This is an <u>abbreviated</u> version of your final science project research report. A maximum of 250 words is allowed.
- The abstract should contain the following. Each part below should be no more than two sentences each.
 - o Introduction
 - o Problem statement
 - Procedures
 - o Results
 - o Conclusions

Step 8_____Due Wednesday, November 20, 2019

- The next step is your Tri-board.
- Your final presentation must be on a Tri-board. You cannot use a poster board.
- Your display should attract and inform.
- No images with faces are allowed on your board.
- Your abstract should not be on the tri-board but at the beginning of your research report in your 3 ring binder.

- Below are the items that should be on your tri-board.
 - o Title/Question
 - o Background Information
 - o Purpose
 - o Hypothesis
 - Materials/Methods
 - o Results
 - o Conclusions
 - o Graphs/Tables
- Below is the correct setup for your science project display.



Step 9-Your project should now be complete. The following items are required for all science fair projects.

- Log Book
- Research Report-in a 3 ring binder
- Abstract-Typed and placed in your 3 ring binder at the beginning of your research report.
- Display Board