Estabrook School Science Fair 2017
Project Overview

A Science Fair project consists of two phases:
- Performing your experiment at home
- Making a display board or presentation for the Science Fair night

For the Estabrook Science Fair, you should do a project related to a question you find interesting:

1. Look at the website resources and books listed below.
2. Do some research on an area of interest to you.
3. Find a project/question which can be answered by an experiment.
4. The simpler the better. There are so many potential topics that the toughest part is narrowing down the topic and asking a very specific question. Parents can help by working with the student to narrow down the topic and formulate an appropriate question.

Once you have identified a question, follow the these steps:
1. Ask a Question: Once you have chosen a topic or project, ask a relevant question you are interested in and are able to answer through experimentation.
2. Formulate a Hypothesis: After posing your question and doing some research, scientists usually formulate a hypothesis. A hypothesis is a “best guess” or prediction of the outcome of the experiment. This hypothesis will help you to design your experiment.
3. Procedure: Once you have a prediction or hypothesis for your question, figure out what procedure or experiment you will use to answer your question.
4. Data Collection: Carefully record the data from your experiment. Make sure the data you collect helps answer the question you are attempting to answer.
5. Results: What happened and what does it mean? Once you have collected your data, you should summarize it and produce your final results. The results of your experiment might be totally unexpected.
6. Conclusion: Write a brief statement that compares your results to your original hypothesis. This is the answer to your original question and doesn’t need to be more than one or two sentences.

Display Exhibit Format

- Each display may include two parts: 1. The write-up and 2. Objects used in performing the experiment. Both parts must fit in a 30” x 30” area.
- The purpose of the display is to show visitors what you did and what the results of your experiment mean.

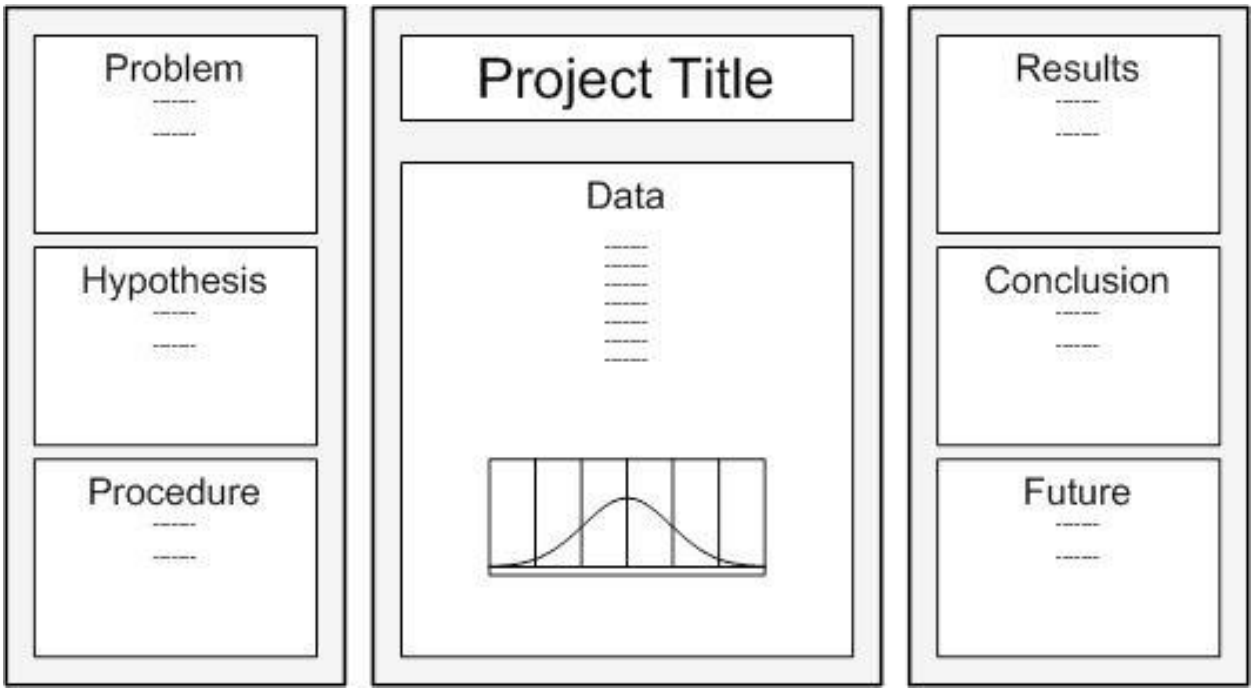
    - **The Write-up** should be on some type of paper (cardboard, poster board or regular paper) and may be handwritten or typed. Computers and tablets may not be used to show the write-up. You may use a tri-fold cardboard for displaying your written material. The size of the display area should not be larger than 36” high by 48” wide, then folded so that it stands up. You may

purchase a display board (available at Staples, Michael's, etc.) or use an old cardboard box. Just be sure it fits in the allotted space.

- Write-up includes:
    - Question or problem
    - Hypothesis
    - Description of experiment conducted (procedure)
    - Data collected
    - Results of experiment
    - Conclusion and possible follow-on research questions

- **Objects used in performing the experiment** may be displayed to enhance your display. Bring things that will help you explain what you did and add interest to the exhibit. You can put these items in front of your presentation board and refer to them while talking about your experiment.
- Remember: No messy or hazardous displays or demonstrations are allowed and there will NOT be power supply available.

Illustration of an exhibit display:



Estabrook Science Fair Resources

Websites:

http://www.sciencebuddies.org/

www.Sciencefairadventure.com

www.Thehappyscientist.com

http://www.tpt.org/newtons/

http://www.ipl.org/div/projectguide/

http://sciencefromscientists.org/programs/science-fairs

http://www.all-science-fair-projects.com/

http://www.madsci.org/

Estabrook Library: The Estabrook library catalog is available to everyone online (no password necessary). Go to: lps.lexingtonma.org and choose Estabrook School, then Estabrook Library Catalog under Quick Links or click HERE. Below are a few books we found, but we encourage you to do your own searches related to your interests.

Science fairs: ideas and activities. Call #: 507 SCI PB
The Magic School Bus and the Science Fair Expedition. Call #: 507.8 COL
Janice VanCleave's Guide to the Best Science Fair Projects. Call # 507.8 VAN PB
Science Project Ideas About the Moon. Call #: 523.3 GAR
Science Project Ideas About Air. Call #: 533 GAR
The Complete Science Fair Handbook. Call #: 537.07 FRE PB
Ivy & Bean, What's the Big Idea? Call #: FIC BAR

Cary Library: The Cary Library catalog is available to everyone online. To request or reserve a book, log in with a Cary library card account. Go to: www.carylibrary.org and choose "Catalog" in the upper left corner of the site. Below are a few books, but we encourage you to do your own searches related to your interests.

Weather projects for young scientists : experiments and science fair ideas. Call #: j551.507 C
Ace your human biology science project : great science fair ideas. YA 507.8 G
Championship science fair projects : 100 sure-to-win experiments. j507.8 B
Janice VanCleave's A+ projects in biology : winning experiments for science fairs and extra credit. Call #: YA 570.78 V
Wheels! science projects with bicycles, skateboards, and skates. Call #: j530.078 G
Slam dunk! science projects with basketball. Call #: j530.078 G