



**ASK QUESTIONS ABOUT THE
WORLD AROUND YOU.
BE CURIOUS.
WONDER.**

Thursday March 14th, 2019

Registration: February 12 - 22, 2019

Poster Board Trifolds will be distributed by February 28th

Your Group: Students may register as individuals or with one or two other partners – no more than 3 students per project. Each student or team will be given a poster board on which to present their project.

Registration: Fill out registration form at:

https://docs.google.com/forms/d/e/1FAIpQLSeDG2p_c_X1P1rLq_BgBFfe9lm2c2BqErB69ONEBpHeRE_taeQ/viiewform?usp=sf_link

Website: Visit the Salt Brook STEM Fair webpage at <http://www.saltbrookpta.com/science-fair.html> for additional resources and guidelines.

Parent Volunteers: Lots of volunteers are needed to make a great STEM Fair. If you can help out with set-up, registration, monitoring or clean up, please sign up using the following sign up genius:

<https://www.signupgenius.com/go/20f0944ada928a6fd0-volunteers>

Trophies: Trophies will be awarded to individuals who participated in the fair for four years. This is not a competition. No competitive prizes will be awarded.

Restrictions:

- Please do not use projectiles, weapons or animals of any kind in the projects.
- If using liquids, you must bring a pan to catch any spills and paper towels for clean up.
- Please do not distribute foods, samples or goods at the fair.

Questions? - Email Diana Ettinger at ettingers4@gmail.com

Group Responsibilities

Project - Choose and execute a project using one of the following:

1. Scientific Method - ask a question, form a hypothesis and test it with an experiment (see pg. 3)
2. Engineering Design Process - design something to solve a problem (see pg. 4)
3. Coding Method (see pg. 5)

Board Presentation - Your board should be a visual representation of your project. The next few pages will specify board layouts depending on your project choice (Scientific Method, Engineering Process, or the Coding Method)

Speech - Students will prepare a brief 1-2 min speech highlighting the key components of their project, which they will present to teachers/high school student volunteers on the night of the fair. Note cards are encouraged if helpful. Your speech should include:

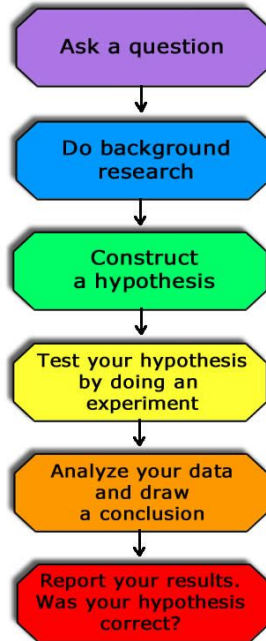
- An explanation of the title with a clear and focused purpose
- A brief description of the design or methodology used
- A brief interpretation of the data or a demonstration of your model
- A conclusion well supported by the project
- Clear and understandable speaking
- A strong demonstration of understanding the science, engineering, or programming involved in the project

Interview - Following the speech, students should be prepared to answer questions from teacher/high school student volunteers such as:

- How they arrived at their projects
- What they learned from their projects
- What they liked best about the experience

For Scientific Method Projects ONLY

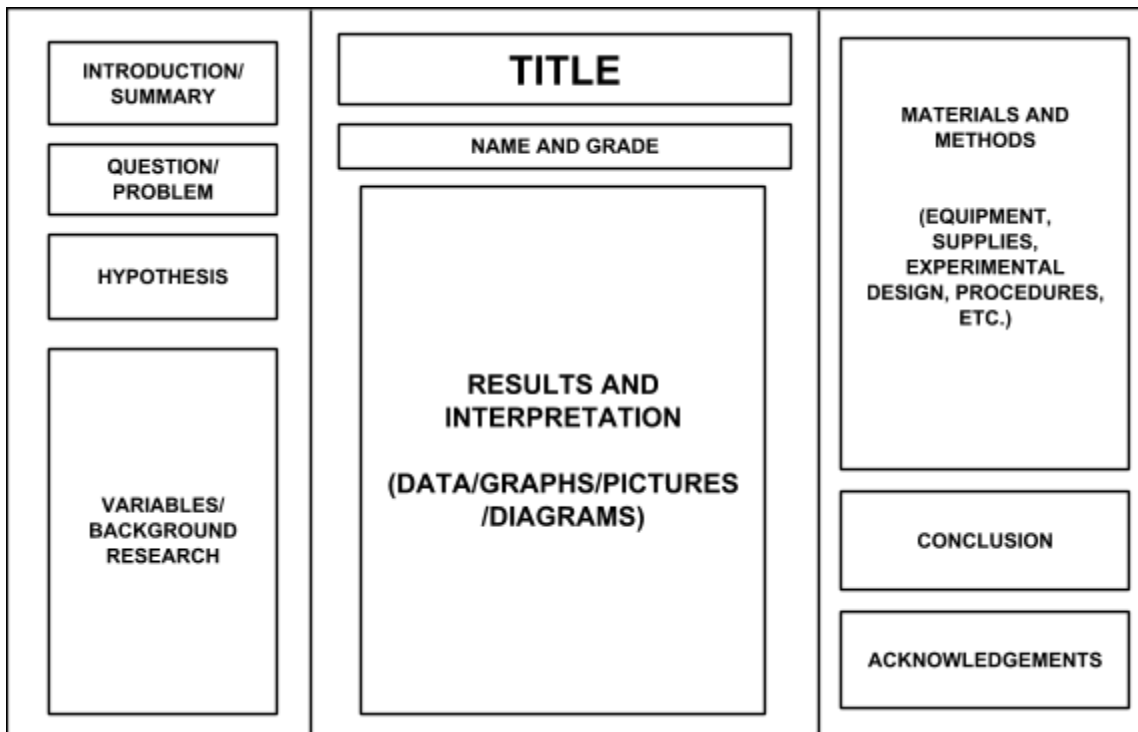
The Scientific Method



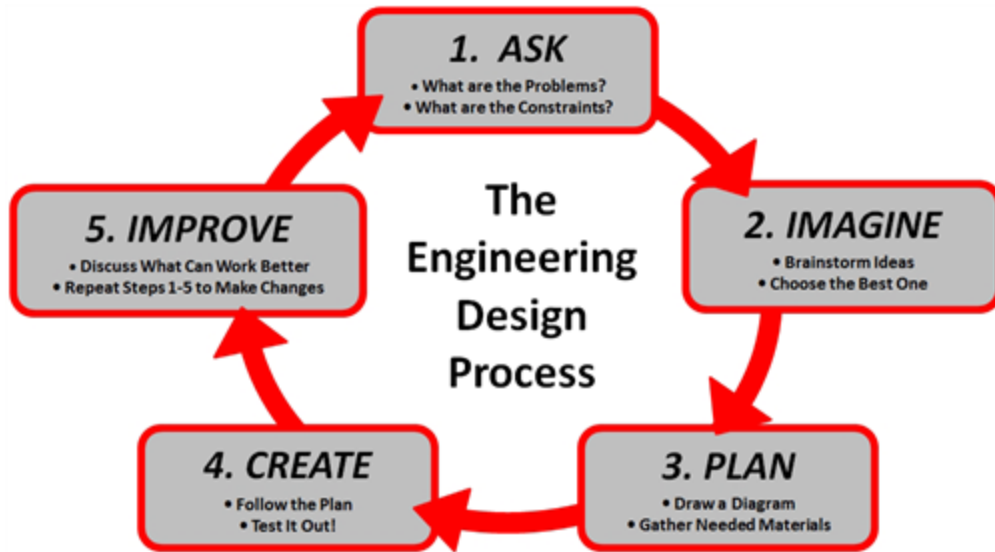
Your board should include:

- Introduction
- Title of Project
- First and last name and grade level clearly posted
- Statement of the Question or Problem
- State your Prediction/Hypothesis
- Identify the Variables (A variable is anything that could potentially change the outcome of your experiment) This is highly recommended for 5th and 6th graders
- List all Materials and Equipment used
- Procedures (List the steps you followed)
- Results (Show Charts, Graphs, Tables, Diagrams)
- Conclusions (What I learned)

Designing your board - Below is a simple example. Be sure to organize your board how best fits your project. Add any research or visual aids to enhance your overall project. Your projects should be a reflection of your own ideas or work. Be creative, neat and take PRIDE in the work you will be presenting at the fair.



*****For Engineering Design Projects ONLY*****

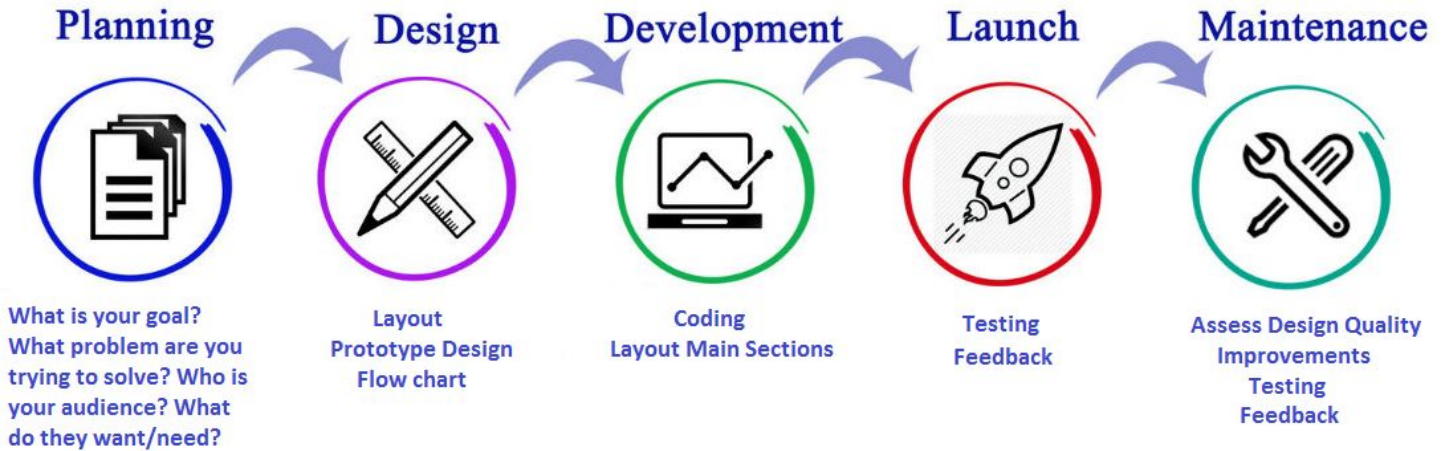


Designing your board - Below is a simple example. Be sure to organize your board how best fits your project. Add any research or visual aids to enhance your overall project. Your projects should be a reflection of your own ideas or work. Be creative, neat and take PRIDE in the work you will be presenting at the fair.

<p>ASK:</p> <p>WHAT IS THE PROBLEM YOU WANT TO SOLVE? WHO WOULD IT HELP?</p>	<p>TITLE</p> <p>NAME AND GRADE</p>	<p>PLAN:</p> <p>ORIGINAL BLUEPRINT HERE</p>
<p>BACKGROUND RESEARCH:</p> <p>WHAT DID YOU NEED TO LEARN?</p>	<p>RESULTS:</p> <p>PICTURES OF FINAL PRODUCT</p> <p>HOW WAS IT TESTED?</p> <p>WAS IT HELPFUL TO THOSE WHO HAD THE NEED?</p>	<p>CREATE:</p> <p>PICTURES AND DESCRIPTIONS OF THE FIRST BUILD</p>
<p>IMAGINE:</p> <p>LIST SOME OF THE IDEAS YOU BRAINSTORMED</p>		<p>IMPROVE:</p> <p>THINGS THAT NEED TO BE FIXED</p>
		<p>ACKNOWLEDGEMENTS</p>

*****For Coding Design Projects ONLY*****

Coding Design Process



Designing your board - Below is a simple example. Be sure to organize your board how best fits your project. Add any research or visual aids to enhance your overall project. Your projects should be a reflection of your own ideas or work. Be creative, neat and take PRIDE in the work you will be presenting at the fair.

<p>GOAL:</p> <p>WHAT IS YOUR GOAL OR THE PROBLEM YOU WANT TO SOLVE? WHO IS YOUR AUDIENCE?</p>	<p>TITLE</p>	<p>TESTING AND FEEDBACK:</p> <p>WHAT PROBLEMS DID YOU ENCOUNTER? HOW DID YOUR AUDIENCE RESPOND?</p>
<p>BACKGROUND RESEARCH:</p> <p>WHAT DID YOU NEED TO LEARN?</p>	<p>NAME AND GRADE</p>	<p>CONCLUSIONS:</p> <p>WERE YOU ABLE TO ACHIEVE YOUR GOAL?</p>
<p>DESIGN:</p> <p>DISPLAY LAYOUT AND/OR FLOWCHART FOR YOUR DESIGN</p>	<p>DEVELOPMENT:</p> <p>FINAL CODE</p> <p>PICTURES OF FINAL PRODUCT</p>	<p>IMPROVE:</p> <p>THINGS THAT NEED TO BE FIXED</p>
		<p>ACKNOWLEDGEMENTS</p>

Schedule of Events for STEM Fair - March 14, 2019

- 3:00 – 4:30 pm** Register and set up poster boards after school in gym and cafeteria
- 6:30 - 6:45 pm** Student arrival. 3rd and 4th graders in the cafeteria. 5th and 6th graders in the gym. Families not permitted in cafeteria or gym; may wait in multipurpose room
- 6:45 – 7:15 pm** Project interviews. Families not permitted in cafeteria or gym; may wait in multipurpose room
- 7:15 – 7:45 pm** Parent/sibling/friends tour of projects (while students remain by posters)
- 7:45 – 8:15 pm** Student viewing of projects
- 8:00 – 8:15 pm** Recognitions announced in gym
- 8:15 – 8:30 pm** Clean up and take boards home.

Thank you for participating!

Mark Your Calendars: Pizza party for participants on **April 9th, 2019**