



Homeschool Fair: April 26, 2019 from 2:30-4pm

Here is an overview of the Scientific Method and how you might apply it to your project. Depending on projects, we may have equipment that can be used to support the exploration of your idea.

Scientific Method

- Ask a **Question**. What is something that you observed that you want to ask a question about, i.e. What, When, Who Which, Why or Where? A question that is measurable can be helpful.
- Do Background **Research**. No need to start from scratch. Use resources like the internet to help get you started gathering information on your topic.
- Construct a **Hypothesis** or educated guess about how something works. A good hypothesis can aid you in making a prediction such as: If __ (I do this) __, then __ (this) __ will happen. It is a good idea that predications be easy to measure.
- Test with an **Experiment**. Have only one variable or factor change one at a time in experiment. Doing an experiment once may give you desired results by accident. It is good to repeat your experiment a number of times and look for similar results.
- **Procedure** working Y or N : If no, troubleshoot procedure. If yes, analyze data and **Draw Conclusions**. Explain your findings in a summary. Did the data you collected support your findings? If not, what is your new prediction if you were to do the experiment again? Results or findings may align with hypothesis or only partially or not at all depending on what the data tells you.
- Finally, **Communicate** those results through a display of a poster and presentation. All of the above highlighted words should be included in your display. We are interested in your results whether they support your hypothesis or not. This is a fun opportunity to communicate what you have learned with others.