



Science investigations focus on research and producing knowledge about the world. Science investigations involve applying the scientific method to a question that could be answered by planning and completing an experiment.

Engineering design and invention focuses on the design and production of a physical product used to solve a problem. These types of projects are accepted at the Shoreline STEM Science Fair but may not be allowed at other STEM competitions.

Computer Science design and invention focuses on the design and production of software or computer hardware to solve a problem. These types of projects are accepted at our STEM Science Fair but may not be allowed at other STEM competitions. They are assessed at our county fair with the Engineering rubric as well.

The boundaries between science investigations, engineering, and computer sciences are not always clear. Your project may fall in the gray area between these categories, and that's OK. Some topics in engineering and computer science are best addressed as a science investigation. Review the information in this handbook to see which seem to best suit your interest.

Scientific Method	Engineering Method (Design Process)
Conduct background research.	Conduct background research.
Ask a question.	Identify a problem or need.
Define a hypothesis.	Decide how you will solve the problem.
Design an experiment to test the hypothesis.	Prepare a preliminary design to solve the problem.
Test the hypothesis with an experiment.	Build and test a prototype of the thing you designed.
Collect and analyze data.	Retest and redesign as needed.
Draw a conclusion.	Draw a conclusion.
Share your results.	Share your results.