

Marin County Secondary Science Fair March 5-8, 2012

Helpful Hints to a Successful Science Project

The best science fair projects are often the ones that spring from your own observations and curiosity. Sometimes the questions you have about how things work can develop into a great project. The time you invest in reading before you settle on a question or hypothesis can make a big difference in the quality of your project. Other people can be good sources of information, but don't allow them to make up the question or hypothesis that will be the focus of your project.

There are several different approaches to developing a project for a science fair.

- Some projects attempt to discover a new relationship between two events or things - a relationship that has not been noticed before;
- Other projects attempt to test a new idea or product to see if it really works the way it is supposed to work;
- School science experiments that don't work out can also be fertile ground for project ideas; or
- Projects can involve improving on an idea or way of doing something.

When you choose a project, you need to do the following:

1. Find out as much **information** about your topic as possible.
2. Create a clearly worded **question** or **hypothesis**.
3. Develop good **procedures** that really test your hypothesis or answer your question.
4. Make sure that the procedures contain a **control** to show that the result could only be produced when that one factor (mentioned in your hypothesis) is changed.
5. Make sure the **procedures are explained** so well that a scientist who specializes in that area of science could also perform them.
6. Check your **arithmetic** and **facts**. Proof your **writing, grammar** and **spelling**.
7. Write a **conclusion** that is supported by the results of your experiment.
8. Make sure that anything you put together **works well** and does not include expensive materials that are not normally available to students.
9. Be **original**. Simply testing an old idea or law of science is a demonstration - not an experiment.
10. Make a **display** that clearly explains your project. It should contain neat and legible labels and titles including your questions or hypotheses. Graphs and/or pictures can be helpful.
11. Write a **brief summary** (abstract) of 200 words or less describing the purpose (question or hypothesis), your method of solution (procedures), and significant conclusions of your project.

