

Steps to Prepare a Science Fair Project

1. Select a Topic

Choose a topic from one of the many different areas of science (biology, chemistry, geology, physics, astrology, psychology, etc.), then focus in on a subject you are interested in. For more information see handout – Resources for a Science Fair Project Idea.

2. Research the Topic

Gather information about your topic from books, magazines, the Internet, people, etc. Keep notes about where you got your information, as you will need to include them as references.

3. Follow a Scientific Method

- A. Determine the Purpose of your experiment - What are you trying to find out?
- B. Come up with your hypothesis - your guess about what the answer will be.
- C. Decide how you will conduct your experiment – this is the design.
- D. Decide on the materials you will need to carry out your experiment.
- E. Decide how you will measure what happens.

4. Run the Experiment and Record the Data

Do the experiment. Keep notes of what you did, how you did it, and what happened. Write down everything you can think of, you might need it later.

5. Evaluate what Happened

Did the experiment go as planned? Think about why things went the way they did (or didn't). You can organize your results in a graph or chart, if that works for your experiment.

6. Develop an Exhibit or Display

Create a display, demonstration, and/or poster to show off your work. It has to be neat, but it does NOT have to be typed. Be creative! Suggested information includes:

- A. **Purpose** (What)
- B. **Hypothesis** (What you thought would happen)
- C. **Design** (Your plan for the experiment)
- D. **Materials** (What you used for the experiment)
- E. **Procedures** (What you did)
- F. **Results** (What happened)
- G. **Conclusion** (Was your hypothesis correct? If not, why do you think it wasn't? What did you learn from the experiment?)
- H. **References** (Where did your information come from?)
- I. **Vocabulary** (What new words did you learn?)

7. Practice Talking about Your Project

Practice explaining your project to someone (parent, friend, grandparent, etc.) People who come to the Science and Learning Fair will be interested to hear about what you did and what you learned.

8. Come to the Fair and have fun! See you there!