

How to do a Science Fair Project

There are lots of websites and books available on how to do a project. Probably too many, and this can be overwhelming. First search the web for "science fair projects" and look at a few sites; some will tell you step by step how to do a project; others will just list ideas.

Another place to start is your nearest library. You can search the catalog for science fair projects in general or choose a specific area of science, like chemistry, physics or electricity, and search for science fair projects in each area. Many books will tell you step-by-step what to do. It's okay to pick a topic straight out of a book.

Most books and sites focus on middle school level, so for your younger students you might just use a science experiment book for their level and keep it simple.

Have the middle or high school student do some reading in the basic area of his topic; this is called the literature review. A typed research report needs to include the Literature Review, the Purpose, the Hypothesis, Procedures, Results and Conclusion. These are the steps in the scientific method and can be explained in a general middle or high school science text book or on a science web site. Other science fair sources have slightly different outlines which are certainly acceptable. Reports are not required for beginner and elementary students at the SMHEA fair. After the research report is complete the student can write a one page summary called the Abstract to be placed on the table in front of the project.

The student needs to keep a logbook of his procedures and results or observations. After the work is complete he needs to start working on the backdrop. The tri-fold backboard can be purchased at a school supply store or discount store. In large type, the board may display the outline used in the report plus diagrams, charts, graphs of data, as well as photographs taken during the work. The regional fair does not allow the front of the display to show pictures of the student's face nor the student's last name to prevent bias of the judges.

The student needs to be prepared to talk about her project. She can have a prepared presentation, but this is not necessary. At the SMHEA Science Fair a parent can sit with a younger student while she meets with the judges, but the student should be the one to do the talking.

Also, if you know any scientists, get their help maybe with special equipment needed. For middle and high school students, check out regional fair site: www.sasef.com for more specific rules.

It is more important to have fun than to be stressed about following strict rules; however, learning the correct steps of the scientific method will help the student with high school science courses as well as with possible research in college or beyond. Don't miss this opportunity to succeed! You can do it!