

# Science Fair Project Suggestions

---

There are many ideas that you can use to begin a science fair project. Some involve purely research, while others involve an experiment of one kind or another. The four most common projects you will see at a science fair are: Scientific Experiment, Scientific Collection, Scientific Demonstration, and Scientific Model. Sometimes you will see the last two categories combined. Each category should have a set of criteria which you can follow to make sure you have met the requirements of the project.

Note: The suggestions are just that, *a suggestion*. Your particular fair may have a specific set of rules or guidelines which you have to follow. If you are participating in a science fair, please pay close attention to the rules outlined for each participant.

- To learn more about setting up a science fair for your home school community, please feel free to contact me at [dawnboyer@journeysingrace.com](mailto:dawnboyer@journeysingrace.com) to find out more.
- You can also research the NIRS Science Fair for ideas and pictures of winning entries. [www.ilinoisregionalsciencefair.org](http://www.ilinoisregionalsciencefair.org)

A few things to remember when you are planning your project.

- Think of the time you have to prepare. If it is winter and you are in a location where it is not warm, it is not likely that plant projects will do well.
  - The ALTERNATIVE: Plan ahead. Use the warm summer months, when the plants are on sale at the nursery to purchase and conduct your experiments. During the cold winter months you can facilitate the research to help you adequately analyze and record the data from your experiment.
- If you are going to display a collection, make sure you have items that fit the general topic you are discussing. Put them in an organized and ordered fashion. ( Hint: Studying Carl Linnaeus and his classification system would be a huge help with this.)
- When you are showcasing a model or a demonstration, make sure you have an accurate model of the scientific principle you are trying to explain. It is imperative to have a working and/or visible model for your project.
- If you are conducting a research project you need to quantify all your results with clarity. A research project may not be acceptable in some science fairs because there is not an actual model, demonstration, or experiment provided. Make sure all the math and analysis supports your hypothesis and research.

## *Science Project Checklist*

---

### SCIENTIFIC EXPERIMENT

- Clearly define the problem.
- State the hypothesis.
- Detail the steps of the experiment.
- Make sure it is easily understood and the procedure is followed.
- Keep track of data.
- Write observations in a journal.
- Use graphics, drawings, photos, etc. for data
- Organize the material and make it complete, concise, and clear.
- Conclude what was learned and how that information was obtained and concluded.

### SCIENTIFIC MODEL/ DEMONSTRATION

- Clearly state the topic.
- Make a drawing or diagram of the model and include in journal.
- List the steps followed to complete the demonstration or model.
- List the materials in order of use.
- Use graphics, drawings, etc. to represent data.
- Conclude what was learned through this process and clearly relate how that conclusion was obtained.
- Keep a journal to record thoughts, questions, or ideas while you are working on your project.
- Classify items into their correct scientific location.

### SCIENTIFIC COLLECTION

- Clearly state the area of science that is represented.
- Be diligent to present an adequate number of specimens for your display.
- Describe how and where the items were obtained.
- Research the natural habitat the pieces were or could be found in.
- Keep track of all your findings in a journal.
- Organize your data in the form of a report.

*\*I have created [The Home Educators' Science Fair Handbook](#) as a downloadable e-book to guide you through the process. You can access it on my website at [www.journeysinrace.com](http://www.journeysinrace.com) in the ebook section.*