

PROJECT CATEGORIES

Once your child decides on a topic for a science fair project, the next step is to discuss which of the following categories is most appropriate for what he/she would like to do. It's important to decide this at the beginning, because there are specific requirements and judging for each category. Knowing these guidelines will help the student structure and organize the project for a successful science fair experience!

1. Scientific Experiment

- a way of answering a question using the “scientific method”
- ask a question
- state your hypothesis (a guess at the answer)
- design an experiment to test your hypothesis
- collect the data
- be sure to **replicate** at least 3 times
- present your results, usually in table and/or graph form
- state your conclusions - do the results support your hypothesis or not?

2. Demonstration of a Scientific Principle

- explore a scientific principle and share your knowledge with others
- best to focus on one principle and use several ways to illustrate it
- the best demonstrations include a model to demonstrate the principle
- should also include drawings, photos, and other visual aids

3. Scientific Collection

- collection of items of scientific interest, e.g. shells, minerals
- collection must be well organized and specimens correctly identified
- should include background research/information
- may include a logbook or journal for additional information

4. Original Computer Program

- original program using any computer language
- examples: graphics or math demonstration, game, utility program
- identify purpose of program
- include display board?
- printout of code?
- program should be run smoothly and require no special skills to use

5. Invention or Innovation

- a useful object that has never been made before (invention)
- a new service or process, or an improvement to something (innovation)
- begins with a “need” or problem to solve
- project must include an Inventor’s Notebook (log of progress towards invention)

6. Illustrated Science Report

- research on a scientific topic that doesn't fit any of the other categories
- often a topic that is impractical for an experiment or demonstration
- examples: lions, Ebola virus, subatomic particles
- needs to include extensive research, expressed in student's own words and original illustrations
- this can be on paper or electronic format
- must also include a display board with visual aids such as pictures, charts, etc.