

Don't Be Disqualified!



Let's get this out of the way first... here is a list of items that will cause your child's project to be automatically disqualified from participating in the fair. We want to put this list at the very top so no one wastes any time building a project that won't be able to compete. Here's the list:

AUTOMATIC DISQUALIFICATION FOR:

- Projects done at home that involve bacteria in any way
- Projects designed to kill vertebrate animals
- **ANY** deaths in a vertebrate animal project due to experimentation
- Human subject projects where there is unacceptable risk involved for the participants

Rules | Display and Safety

The following list outlines items that **are not to be displayed** with your science fair project. Please read the list, make any necessary corrections to your project. In order to compete, your project board must abide by these rules. There will be no exceptions.

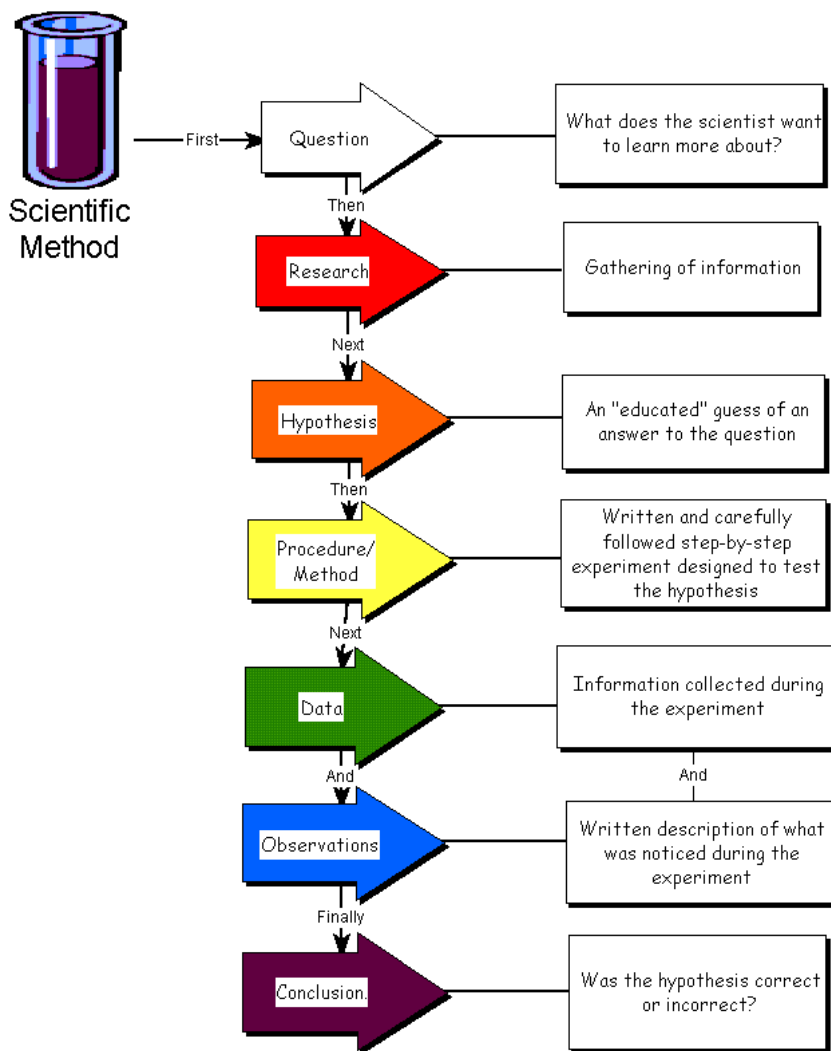
The CUSEF Committee reserves the right to remove anything displayed at a project that may—at their sole discretion—be deemed hazardous or inappropriate for public display.

- Living organisms, including plants
- Plant materials in their raw, unprocessed state
- Human or animal food
- Human or animal parts/tissues or fluids †
- Soil or waste samples
- Laboratory or Household chemicals—including water
- Unopened containers with food, chemicals etc. ††
- Poisons, drugs, hazardous devices, weapons
- Sharp items—including glass of any sort; if it is made of glass, it may not be displayed
- Flames or highly flammable materials
- Empty tanks that previously contained combustible liquids or gases
- Batteries with open-top cells
- Photographs or other visuals of dead vertebrate animals or vertebrate animals in surgical techniques, dissection, other lab techniques or improper handling methods
- Recognizable photographs of people, other than yourself or your family—unless you have their written consent
- Awards, medals, business cards, flags, phone numbers, fax numbers, addresses or lists of personal accomplishments

† You may display: teeth, hair, fingernails, and dried animal bones.

†† Empty containers are permitted for display.

Use the Scientific Method!



Simple Example of Scientific Method:

Purpose: I want my car to start and I am out of gas. --→**Question:** Does a car need gas to start?

Hypothesis: If I put gas in my car, it will start.

Materials: 5 gallon gas can, 5 gallons gasoline, money to buy gasoline, a ride to the gas station

Procedure: First, I will call my friend Bill and ask for a ride to the gas station. I will take the five gallon gas can and fill it with five gallons of gasoline at the pump. After paying the gas station owner for the gasoline, I will get a ride back to my car and put the gasoline in the tank. Once the gasoline is in the tank, I will attempt to restart the car.

Results- Data-Observations: The car started on the first try.

Conclusion: When I put gas in my car, it started. Yes, a car does need gas to start.

Please remember: There is a **HUGE** difference between a demonstration and an experiment. Ask your teacher to help you determine if your project is a demonstration or an experiment. Experiments follow the scientific method! They start with a question.

What is the Parent's Role?

The parent's role is not exactly hands-on, but not exactly hands-off either. Think of yourself as chief facilitator. Your place is in the back seat, hands folded (make that clasped!) in your lap, with the student at the wheel (except, of course, for those trips to the craft store and transporting delicate 3-D models and tri-fold display boards).

Based on your available time, you may end up wearing several hats: lab assistant, personal shopper, deadline cop. Be there for moral support, to help gather supplies, keep an eye on the calendar, monitor progress, and to make sure things don't (unintentionally) explode, catch on fire, or slip through the cracks.

Regardless of your level of expertise in science, consider volunteering to help in the classroom or at the science fair itself. Teachers usually welcome extra help, as well as students whose parents may not have as much time to help as they'd like.

Towards the end of the process, build in time to listen to your child rehearse the oral presentation. Be a kind audience member, give gentle reminders and a bit of constructive criticism, and ask helpful questions. Do some role playing and add some humor if your child doesn't respond well to the exercise.

On the day of the science fair, your job is to keep things calm and cool, and to remind your child to relax and enjoy the event. Parents are not allowed into the competition during judging. If a competition is involved, consider doing something special back at home that evening. Bake a special cake, or have a sibling make a hand-made ribbon or trophy to honor their hard work, regardless of where they placed.

Websites:

www.sciencebuddies.org

www.super-science-fair-projects.com

www.all-science-fair-projects.com



Project Display Boards



- For almost every science fair project, you need to prepare a **display board** to communicate your work to others. In most cases you will use a standard, three-panel display board that unfolds to be 36" tall by 48" wide.
- **Organize your information** like a newspaper so that your audience can quickly follow the course of your experiment by reading from top to bottom, then left to right. Include each step of your science fair project: Title, questions, hypotheses, variables, background research, materials, process, data, and conclusion. And don't forget your first and last name!
- **Use a font size of at least 16 points** for the text on your display board, so that it is easy to read from a few feet away. It's okay to use slightly smaller fonts for captions on picture and tables.
- **The title should be big and easily read from across the room.** Choose one that accurately describes your work, but also grabs peoples' attention.
- **A picture speaks a thousand words!** Use photos or draw diagrams to present non-numerical data, to propose models that explain your results, or just to show your experimental setup. But, don't put text on top of photographs or images. It can be very difficult to read.
- **Check the rules of the science fair!** Be sure you follow the rules because you could be disqualified if you display information that is prohibited. For a list of the rules please go to the link provided on the Barnett web page.

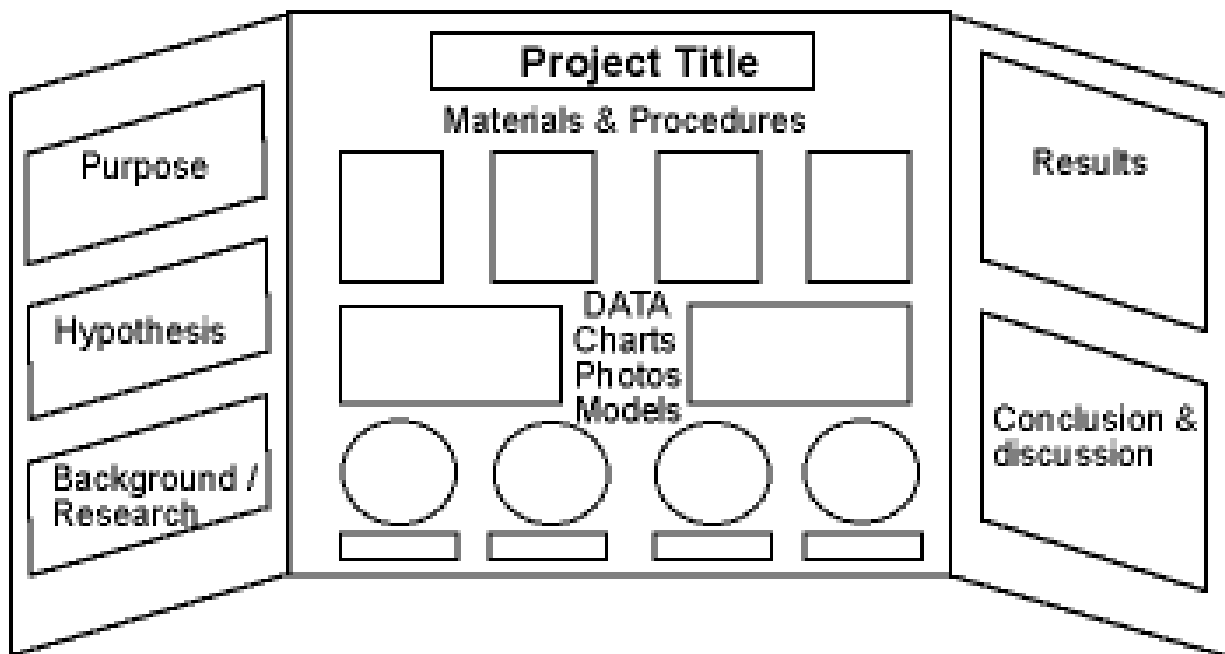


Figure 1 Example display