

GRANITE SCHOOL DISTRICT K-12 SCIENCE FAIR RULES

Projects must fit within one of the following categories:

Animal Science	Electrical and Mechanical
Behavioral & Social Science	Energy and Transportation
Cellular and Molecular Science	Environmental Science
Chemistry	Medicine and Health Science
Computer Science	Microbiology
Earth Science	Physics and Astronomy
Engineering	Plant Science
Materials and Bioengineering	

For more detailed information about categories visit www.sciserv.org/isef/categories.asp

Team Projects

Team projects are allowed. Teams may consist of up to 3 students.

Project Data Book

Each project needs to have its **project data book** in the display. The project data book will contain detailed notes about the process of the project. Data tables, information collected and observed will be recorded here (day-by-day or week-by-week). Make sure that entries in the data book are dated! This can be a handwritten section of a notebook. There should be lots of information in this project data book (ideas, amounts, steps, errors, results, dates, drawings, formulas etc...). This is also where students should place permission forms for human test subjects. (See Project Data book hints next page)

Display of Project

What is allowed in the display booth?

Display board
Project Data Book
Summary Report (optional)

In order to bring the GSD science fair into alignment with the regional and national fairs, we will follow their guidelines for project displays. You may choose to follow the same guidelines at your local school fairs or you may be more lenient. The goal is for the students to create a well-done display board and project data book and to let the student explain the science, rather than using a prop. Good science doesn't need elaborate displays!

Display size: tri-fold display board (available in district warehouse)

Items **Not** Allowed in Display at the GSD or Regional or National fairs

1. Living organisms, including plants
2. Taxidermy specimens or parts
3. Preserved vertebrate or invertebrate animals
4. Human or animal food
5. Human/animal parts or body fluids (for example, blood, urine)
6. Plant materials (living, dead, or preserved) that are in their raw, unprocessed, or non-manufactured state (Exception: manufactured construction materials used in building the project or display)
7. All chemicals including water
8. All hazardous substances or devices (for example, poisons, drugs, firearms, weapons, ammunition, reloading devices, and lasers)
9. Dry ice or other sublimating solids
10. Sharp items (for example, syringes, needles, pipettes, knives)
11. Flames or highly flammable materials
12. Batteries with open-top cells
13. Awards, medals, business cards, flags, endorsements and/or acknowledgments (graphic or written) unless the item(s) are an integral part of the project
14. Photographs or other visual presentations **depicting vertebrate animals in surgical** techniques, dissections, necropsies, or other lab procedures
15. Active Internet or e-mail connections as part of displaying or operating the project

16. Glass or glass objects

So what does this really mean? Bring the student, the display board and a project data book. Leave all the other stuff at home (bottles, samples, machines, plants etc...) Take lots of good pictures and place them on the board and in the project data book instead. Winning projects don't need props!

Regulations for Animal Experimentation

Student projects that use living organisms (excluding plants) must follow these guidelines:

1. Experimentation on living organisms will only be conducted on lower-order life forms, such as bacteria*, fungi**, protozoans and insects.
2. Vertebrate animals are NOT to be used in a science fair project with the following exceptions:
 - a. Observation of normal living patterns of pets, fish or domesticated animals. Normal behavioral studies may be carried out, but project must be carefully selected so neither physiological or psychological harm result
 - b. Observation of normal living patterns of wild animals in a free-living state or in zoological parks, gardens or aquariums
 - c. Living vertebrate animals will not be allowed in the display of the project.
 - d. Cells, tissues, or organs may be purchased from a biological supply company or research facility.

Regulations for Human Experimentation

1. Experimentation on humans must conform to the same regulations as other animals. Human studies (including surveys, taste testing, and physical exertion) **must have prior approval** from the mentor teacher or district science specialist **and permission slips signed** by the participant and the parent/guardian.

*Pathogenic bacteria experimentation is prohibited. Other bacteria experiments must have sealed Petri dishes. As part of the project, the student should have a plan for disposal.

**Fungi must be contained in a sealed container as part of the project; a plan for disposal must be included in the project.

Hints for Keeping a Project Data Book

A project data book is your most treasured piece of work. Accurate and detailed notes make a logical and winning project. Good notes show consistency and thoroughness to the judges and will help you when writing your research paper.

- Don't remove any pages. Simply put a line through errors.
- All pages should be numbered before any data is entered.
- All entries should be dated.
- Each new entry should begin on a separate page.
- Use more than one notebook if necessary.
- Don't put rough drafts of the research paper in the notebook.
- All entries must be legibly printed.

Contents of the Project Data Book

- List of potential science fair projects.
- Project title.
- Experimental design. Identification of variables etc.
- Data Tables (Raw and Summary Data)
- Regular observations (similar to a diary)
- Calculations.
- Graphs
- Reading notes from literature pertaining to the project, including references and citations.

Documentation: The proof that the experiment was completed.

- Date all entries in the Project Data Book
- Photograph when ever possible. Photograph the progress in various stages when possible.
- If scientific equipment is used (Spectrophotometer, HPLC, IR, NMR,) save all print outs from the machine.
- If the project is to be a continuation from past years you must have all your old notebooks.
- The burden of proof that the project was completed is on the student. To avoid any questions as to the validity of your experiment you should document everything.

