

Metro Richmond
STEM Fair



Now What? Getting Ready for the Fair

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Getting Ready for the Fair

Congratulations on completing a dynamic science project and research paper! Now that you have been accepted to the Metro Richmond STEM Fair, you will need to make a display board.

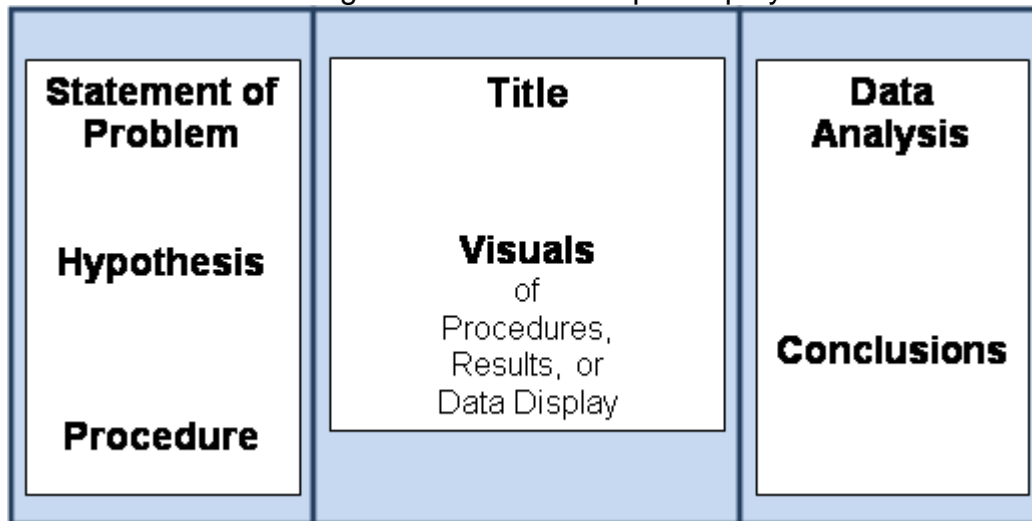
Constructing the Display Board

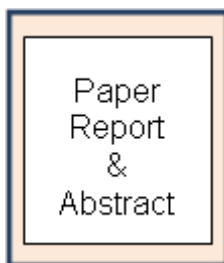
A display board should have the following components:

- title,
- statement of problem,
- procedure (methods-materials),
- results, and
- conclusion.



The diagram below is a sample display board





The maximum amount of space available for your display board is 36" wide by 18" deep. Display boards may not be taller than 96" inches (8 ft.). This is to include the *height of the table*.

Commercial display boards are available in many large office supply stores and craft stores and easily fit the requirements. Alternatively, you may construct your own display board from corrugated cardboard, foam core board, plywood or Plexiglas. The three-panel board may be hinged or reinforced with tape. Any equipment accompanying the exhibit must fit in front of your board or under the table.

All lettering should be neat and legible and spelling should be carefully checked. Use colors that complement and enhance photographs and display materials. White commercial display boards can work just as well as the brightly colored ones for organized visually interesting exhibits.

Additional information on the project display can be found by reviewing the ISEF *Display and Safety Authority* section of the guide found at the [2016 Intel ISEF International Rules and Regulations](#). Another good source can be found at the Illinois Institute of Technology science project website <http://sciencefair.math.iit.edu/>.



Photographs or diagrams of larger equipment are an excellent alternative to displaying them at the fair. Also, photographs of your experimental set-up and procedure are a great way to add "eye-appeal" to your display. They also allow you to showcase items such as plants, animals, soil, etc. which **are not allowed** to be physically displayed at the fair. Keep in mind that each photograph on your display **must** have a photo credit as to the source. If all of the pictures were taken by the same person, a single photo credit stating this is acceptable. Students must have written permission to use pictures of **ANY** person, other than the researcher him/herself or pictures that are in the public domain from the internet. A simple note with the person's signature may be used for this and **must** be available during the safety inspection.

Display & Safety Rules

Normal household electric current will be available for exhibits only **when absolutely necessary** for the presentation of the project. Access to power is limited; therefore, you **must specify** any power requirements on the **Student Exhibit Agreement Form**. Electrical devices, computers or any bulky materials whose sole purpose is to "decorate" the display should be left at home. We cannot guarantee power for a laptop computer. If you feel the need to use one, then plan to charge your computer in advance.

Unacceptable Items for Display

The following items cannot be displayed:

- Living organisms, including plant materials (living, preserved or dried) and microbes;
- Taxidermy specimens or parts;
- Preserved vertebrate or invertebrate animals;
- Human or animal body parts or body fluids (e.g. blood, urine) [Note: exceptions are histological dry mount sections and completely sealed wet mount tissue slides];
- All soil and waste samples, unless they are encased in a slab of acrylic;
- All chemicals, including water (unless the water is integral to an enclosed apparatus or if the water is supplied by the Safety Inspector);
- Poisons, drugs, controlled substances, hazardous substances or devices such as firearms, weapons, ammunition, or reloading devices;
- Food, either human or animal;
- Sharp items, such as syringes, pipettes, needles, knives, etc. or glass objects;
- Any flames, open or concealed, or highly flammable display materials;
- Liquid nitrogen, dry ice or other sublimating solids;
- Tanks which have contained combustible gases or liquids, including butane and propane;
- Lights and any other item that serve as a decoration;
- Batteries with open top cells;
- Awards, medals, business cards, personal accomplishments (ex. certificates and awards), acknowledgments, etc.;
- Photographs or other visual presentations depicting vertebrate animals in surgical techniques, dissection, necropsies or other lab procedures;
- Any equipment or apparatus which is deemed unsafe by the Safety Inspectors;
- Active Internet or email connections, web addresses, email addresses, telephone numbers.

Acceptable Items for Display

- Photographs of the student researcher. **Photographs of any other people require written permission;**

- All photographs, especially those of animals and people, must be deemed non-offensive by the Safety Inspector and must include a photo credit, including those from the internet, magazines, newspapers, etc.;
- Projects with unshielded belts, pulleys, chains and moving parts with tension or pinch points only if the equipment is not operated and could not accidentally be operated by the public;
- Class III and IV lasers if used for display only and not operated;
- Class II laser may be operated if the following apply:
 1. must be operated by student researcher and **only during judging**,
 2. posted sign must read "**Laser Radiation: Do Not Stare into Beam**",
 3. must have protective housing that prevents visual and physical access to beam,
 4. and must be disconnected when not operating.
- Any apparatus producing temperatures that will cause physical burns must be adequately insulated;
- Electrical equipment as long as it is deemed safe by the Safety Inspector and/or the Coordinator. For additional information on electrical equipment, see the [2016 Rules and Guidelines Guide](#).

Exhibit Set-Up

Students will set up their exhibits on the Friday before the Fair. **You must bring everything that will be displayed on Saturday with you at this time for safety approval.** Parents and other visitors will not be allowed into the exhibit area at this time. It is the policy of the Metro Richmond STEM Fair that the project is the responsibility of the student, including setting up the display board for judging.

In addition to the display board, students should have the following items at their exhibit:

- A copy of their research paper;
- An abstract that summarizes their project work (one page, 250 word maximum);
- Their lab notebook;
- Items that require explanation and are integral to the project;
- Student designed equipment (if it is small enough to fit on the table in front of the display);
- Photographs of the experimental set-up are encouraged.

After setting up the display, you **must wait** by your project for a safety officer to check the exhibit for compliance with the Fair requirements. The signed safety certificate must be displayed with the project.

If you have items which you do not want to leave overnight at the Fair site, please take those items home on Friday. When you arrive on Saturday, you will be able to complete your display with this item(s). **[Note: The judges will have already previewed your project by the time you arrive, so every effort should be made to leave all parts of your display set-up on Friday.]**