## Model-Project Guidelines



## **Overview of Submission**

The idea behind a working model submission for the science fair is that the model will represent not just a structure or simple concept, **but also a process or function**. For example, if you choose the topic Cell Membrane, you should show the structure and demonstrate semi-permeability by having some molecules passing through and others unable to. You are also expected to complete background research that will be included on your poster and discussed in your presentation.

In the end your working model will be evaluated on the following criteria:

- model design and demonstration
- poster display
- oral presentation

## Project Display – What should it look like on the day of the fair?<sup>1</sup>

Your poster will include (1) background research and (2) a carefully drawn design diagram showing all structures, parts and functioning aspects of the system. The important parts of the model should be labeled so the diagram may be used as a "key" to understanding the model.

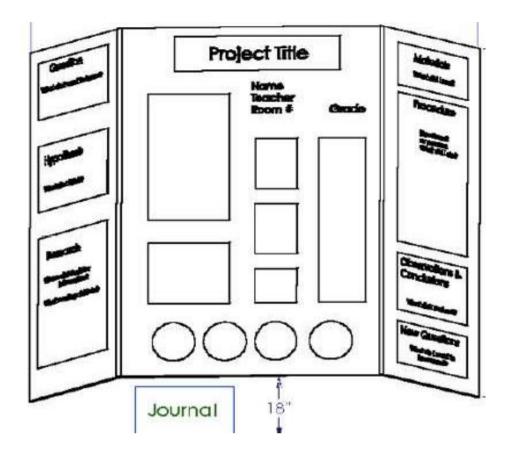
The background research component should be displayed shortly on the display. It should summarize the process you are modeling and describe how the model functions and its applications to the natural or engineered world. Proper citation and reference is a must! References must be included on the project display. Failure to do this will be considered plagiarism; school policies on plagiarism will apply. (MLA format accepted.)

Your project should be displayed in a neat, clear, visible, well-organized manner. Use your creativity to design the display poster, with the following important guidelines:

- Project displays must be free standing (not attached to walls, ceilings, etc.) and fit on a double-size desk. This means the display surface area must be no larger than 148 cm wide by 52 cm deep (but it may be smaller).
- If you have an unusual model or display that is larger than this, or require special placement, hanging up, or electricity, please request this in writing on Form 2.
- Note: Projects requiring electricity should use batteries or other power sources, if possible. If electrical power is needed, you must have prior approval by the Science Coordinator.
- Each project must be accompanied by a poster display that explains the exhibit. This display board/backdrop should not exceed 100 cm height x 148cm wide (two ~40cm wings and a ~70 cm back)

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<sup>&</sup>lt;sup>1</sup> Adaptations have been made from "science-o-rama!: Great Minds at Work, Information Guide, Grades K-5, Tuesday, February 1st, 2005, Los Alamitos Cafeteria".



- Lettering should be clear and large enough to be seen from a distance. Charts, graphs, photos and drawings should be labeled.
- The name and section of all group members and the group's number (given upon registration) must be <u>clearly displayed</u>.
- The area in front of your poster display should be used for your constructed model. **Do not display anything that could be hazardous**; use photos or drawings instead. DO NOT DISPLAY: dangerous chemicals; combustible solids, fluids, or gases; flames; open containers of liquid; live animals; expensive or fragile items; or any hazardous substance.
- Do not consume food or drink for personal consumption while displaying your project. This can disqualify you from the competition!
- Students may use their own computer to supplement their project presentation, but at their own risk these should be removed when participants are not actively presenting their project. ACS assumes no responsibility for personal computers used at this fair.

## Oral presentation – What do I have to say about my project?

You will talk about your project in two ways. One will be the formal presentation for the team of judges. Expectations for your formal presentation are as follows:

• ALL members of the group should be present and take part in the presentation during judging. Missing team members will not earn the percentage bonus! (In the event of an emergency, serious illness or academic conflict, contact your Project Supervisor in advance.)

- You should prepare an oral presentation of 7 to 10 minutes in length. If your presentation falls outside of this time range you will lose points. We will cut you off if you talk for more than 12 minutes. (See Presentation rubric for details.)
- In the presentation, you need to summarize your background research, the process you are demonstrating and its wider purpose. Incorporate all the capabilities of your model into your presentation show it off!! Also discuss the process of construction, your materials, modifications you made, challenges you experienced, or if you would change something if you were to do this project again.
- The judges will ask you questions about your project. Practice answering questions posed by someone who is not part of the project so that you are prepared and calm.

The other presentation will be the informal presentation of your project to your peers. On the day of the science fair, many students will come to see and admire your hard work. They will have a lot of questions for you, different from those of the judges, about your project and how you carried it out.

You are required to be with your project at all times listed in the Science Fair schedule as "project poster session".