### MODEL SCIENCE FAIR JUDGING CRITERIA

#### 1. SKILLS AND PROCEDURES

Does the project answer a specific question? Has the appropriate project form (experiment, demonstration, model, collection, or invention) been used to answer the specific question?

#### For Experiments:

Has a hypothesis been formulated? (answers the question) Was the scientific method followed to test the hypothesis? Were the observations and measurements recorded? Was data analyzed accurately? Was an accurate conclusion drawn based on observation and data?

For Demonstrations, Models, Collections, or Inventions: Did the model or demonstration work? Were models or inventions constructed accurately? Was the invention realistic, creative, and useful? Did the collection have a suitable number of items? Was the collection organized and labeled appropriately? Did the model, collection, or demonstration teach the desired topic?

#### 2. UNDERSTANDING

Were project and procedures clearly explained? Was the scientific principle explained and understood? Was the research and how it related to the project presented accurately? Was the importance of this information clearly explained?

#### 3. CLARITY

Did the observer easily understand what was done?

#### 4. DISPLAY

Was the display neat, attractive, colorful, and appropriate for the project? Was the display well constructed and sturdy? Did the display meet Science Fair size requirements? Were effective graphics used to display data? Were graphics clearly labeled? Does the display contain accurate research information? Was the display student-generated?

## **HELPFUL CONSTRUCTION TIPS**

#### MATERIAL

Make the display from any sturdy material. Remember that it should stand by itself on the table. Use mat board, poster board, or illustration board. Do not use tag board or railroad board (such as that sold at Long's Drugstore) for the display. It is not sturdy enough to stand without support.

#### LETTERING

Your title should be cut out of construction or poster paper and glued to the display. The use of large stencils will make the letters more attractive. Posters could be lettered by hand, first in pencil and then retraced in marker. Stick-on letters could also be purchased at office supply stores. Computer-generated lettering could be used if trimmed and attached neatly. Whichever lettering style is used, make sure that all letters and labels are mounted horizontally on the display. Select a lettering style that is easy to read and understood from a distance. Neatness is the key!

#### COLOR

Before you go any further, decide what colors you will use. Choose contrasting colors for lettering. Mount diagrams, information, and photographs with complementing background colors. Sometimes a colored border focuses attention to the middle of the display. If you are in doubt about color combination, get another opinion.

#### DRAWINGS

Drawings and sketches should always be drawn in pencil first and then retraced. Use another sheet of paper to complete the drawing rather than drawing directly on to the display. You can fix your mistakes more easily and then mount it on the display. Be sure to color and label every drawing, illustration, or diagram.

#### PHOTOS

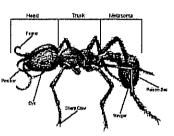
Good photography can be enlarged at a photo dealer to 5"x7" or 8"x10" so that you can show your picture clearly. Every project does not need photos, but if you have a camera, you might consider recording your progress. Photos on your display should also be labeled.

### Science Fair Projects Come Alive with Graphic Aids

Have you ever heard the saying that a picture is worth a thousand words? In the case of your science fair presentation, this is definitely true. You will need to have some graphic aids for your audience to quickly understand your project. The graphic aids you choose will depend on your project. For the most part, all projects should have a data table and a diagram or a photograph. Use the information to help you correctly choose the graphic aid you will need.



•Show the parts of something or how something works



- •Are useful for explaining detailed information
- •Usually have labels that name the parts

Diagrams



#### Photographs

•Help your audience visualize a setting, people, or other things that may be unfamiliar to your listeners



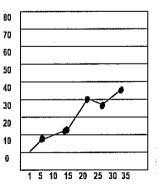
# 3

### Line Graphs

•Have points plotted on a scale and then joined by a line

+Often show a *trend* which 40 is the degree of change over 30 a period of time 20

\*Show an increase with an upward line



- •Show a decrease with a downward line
- •Show no change with a line that stays level



•Compare two or more sets of information



•Show how sets of facts are related

•Can be shown with vertical or horizontal bars with each bar representing a measurement



### **Circle Graphs**

•Show how one part is related to the whole and to the other parts, with a circle representing 100%, or a whole amount



•Are divided into wedge-shaped slices, each representing a percentage of the whole

•Are often used to show how money is spent or to compare the relative sizes of populations or places

# 6

### **Charts and Tables**

Help organize statistics

•Enable you to compare many different items at a glance

•Usually are organized in labeled columns and rows

	Sand	Clay
Test 1		
Test 2		

## SCIENCE FAIR SELF EVALUATION

NAN	ME:	ROOM:	GRADE:		
1.	What did you learn most by compl	eting this project?			
2.	What were some problems that you encountered while completing it?				
3.	Did you pace your workload adequ	ately to meet the project'	s deadline? Explain.		
4.	What part(s) of the project are you	ject are you most proud and especially want someone to notice?			
 5.	What part(s) of the project could h	ect could have used more effort? Why?			
6.	How does your project idea compa	ea compare to projects completed by other students your age?			
7.	How does your display compare to	o others? What grade wou	uld you give yourself?		