Judge's Instructions

Your participation in the Sioux Valley Middle School Science Fair is greatly appreciated. The notes below, along with the enclosed information, will give you an opportunity to review the judging procedure and criteria for judging in our fair.

Enclosed Forms

Criteria for Judging, Judge's Score Sheet, Sample Judging Questions

Judging Categories

Each project will be categorized by the grade level of the student. The eighth grade students will be judged first, with seventh grade following.

Judging Criteria

The enclosed *Criteria for Judging* form should be analyzed carefully prior to judging. It suggests areas for emphasis in evaluating the project and gives guidance on evaluation of those areas.

Student Interviews

The students will make a formal presentation and then ask you if you have any questions. The student presentations and the questions you ask will help you to determine how well each student understands their experimentation.

Criteria for Judging

CREATIVITY . . . . . 10 POINTS

*Originality of the Problem *Ingenuity of the Solution

Does the project show creative ability and originality in: the question asked? The approach to solving the problem? The analysis of the data? The use of equipment?

Obviously, no project would be creative and original in all of these aspects. One must keep in mind that one is dealing with young students. Is the project creative in terms of science for that age student?

A student should not be penalized for taking help from others (all professionals receive help to some degree in some way.) Credit for creative ability should be in the regard to the contribution made by the student.

SCIENTIFIC METHOD . . . . . 40 POINTS

*Question *Variables and Controls *Hypothesis *Procedure
*Results and Conclusions *Practical Applications

Did the student have a clear idea of shat he/she wanted to accomplish? Consider the difficulty of the problem and whether or not it is sufficiently limited so that it is possible of attack. Is there a procedural plan for obtaining a solution? If controls were necessary, was the need recognized, and were they correctly used? Are the variables clearly recognized and defined? Does the conclusion explain the results and adequately answer the question?

LEVEL OF DIFFICULTY . . . . . 10 POINTS

*Appropriate to the age level *Amount of Independent Work

Does the student have the skills required to do all the work necessary to obtain the data which supports the project? What assistance was received from parents and others? Some students were required to have adult supervision due to their age and the safety hazards associated with their particular project. They should not be penalized for having adult supervision, although the student must be capable of actually carrying out the experiment themselves.

DISPLAY . . . . . 10 POINTS

*Visual Impact *Information Presentation

Has the student expressed him/herself well in written material? How clearly are the data and results presented? How well does the display explain itself? Is the display aesthetically pleasing?

ORAL PRESENTATION . . . . . 10 POINTS

*Poise and Articulation *Basic Knowledge of the Topic

How clearly is the student able to discuss the project? Is he/she able to explain its purpose, procedure, and conclusions in a clear and concise manner? Does the student show respect for the judge during the interview?

WHAT TO LOOK FOR:

- The quality of work done on a project and how well that student understands the project and the area in which he/she has been working should be considered primary to evaluating the actual physical display.
- The project should be compared with other projects in its grade division and not with projects seen elsewhere under other circumstances.
- A project should involve laboratory, field, or theoretical work, and not simply library research.
- If the project is a group project, note how well the students in the group worked together. If it appears that one student has done the majority of the work, please note that at the bottom of the score sheet.

JUDGE'S SCORE SHEET

Project number/name _____

CATEGORY	IMPRESSIVE		ADEQUATE		MINIMAL	
I. Creativity						
Originality of the problem	5	4	3	2	1	0
Ingenuity of the solution	5	4	3	2	1	0
				Creativity Subtotal:		
II. Scientific Method						
Question that was asked is clear	5	4	3	2	1	0
Hypothesis that was tested is clear	5	4	3	2	1	0
Experiments were appropriate to question	5	4	3	2	1	0
Measurements were made and recorded	5	4	3	2	1	0
Results **(tables, graphs, pictures) are shown**	5	4	3	2	1	0
Conclusions agree with the results	5	4	3	2	1	0
Conclusions are relevant to the hypothesis	5	4	3	2	1	0
Practical applications are discussed	5	4	3	2	1	0
				Scientific Method Subtotal:		
III. Level of Difficulty						
Difficulty is appropriate to age of student	5	4	3	2	1	0
Amount of **independent work** by student	5	4	3	2	1	0
				Level of Difficulty Subtotal:		
IV. Display						
Display is **neat and informative**	5	4	3	2	1	0
Overall **visual impact** of display	5	4	3	2	1	0
				Display Subtotal:		
V. Oral Interview						
Student can **explain** what was done & why	5	4	3	2	1	0
Student can **answer** questions about project	5	4	3	2	1	0
Student's **poise and articulation**	5	4	3	2	1	0
				Oral Interview Subtotal:		

Total Points _____

Comments:_____

_____

_____

Sample Judging Questions

CREATIVITY

- How did you get interested in your topic?
- How did you come up with the idea for your purpose?
- Why did you decide to solve this problem?
- How did you prepare the materials for your investigation?

SCIENTIFIC METHOD

- What problem were you trying to solve?
- What variables did you control?
- What experimental limitations did you encounter?
- How does your conclusion answer your problem?
- What practical applications does your work have in the real world?
- What sources of information did you use in conducting research prior to your investigation?
- What did you learn from your background study?
- How many trials did you conduct?
- How did you measure and analyze your data?

LEVEL OF DIFFICULTY

- What help did you receive from others?
- Did you find this project challenging?
- Do you intend to continue work in this area?

DISPLAY

- Did you design the display yourself?
- What part of your display will attract interest in your project?