

# Judging Guide

## Bartlesville District Science Fair



### Judging Criteria

Exhibits are judged on the following basis:

	<b>Individual</b>	<b>Team</b>
<b>Creative Ability</b>	30 Points	25 Points
<b>Scientific Thought Engineering Goals</b>	30 Points	25 Points
<b>Thoroughness</b>	15 Points	12 Points
<b>Skill</b>	15 Points	12 Points
<b>Clarity</b>	10 Points	10 Points
<b>Teamwork</b>		16 Points
<b>Total</b>	100 Points	100 Points

### Creative Ability (30 Points; 25 Points)

Does the project show creative ability and originality:

The question asked?

The approach to answering the question?

The collection of data?

The analysis of the data?

The interpretation of the data?

The use of equipment?

The construction or design of new equipment?

A student should not be penalized for taking help from others, but credit for creative ability should be for what the student contributed and not for what others have done for him/her.

For example, did a student get an idea for the project from a textbook suggestion for research, or did he/she develop the idea as a result of reading or work that he/she has done. The idea that came genuinely from the work or thinking of a student would be considered more creative. You may want to ask the student, "How did you select this project?"

Collections cannot be considered to be creative unless they are used to support an investigation and help to answer the question in some new way.

For engineering, a clear distinction should be made between gadgeteering and a genuine contribution. Creative engineering projects should demonstrate an efficient way to solve a problem in a way that will be acceptable to the potential user.

### **Scientific Thought/Engineering Goals (30 Points; 25 Points)**

#### **Scientific Thought**

- Is the question stated clearly and unambiguously?
- Was the question sufficiently limited so that it was possible to answer it?
- Was there a procedural plan for obtaining an answer?
- Are the variables clearly recognized and defined?
- Were appropriate control experiments run?
- Are there adequate data to support the conclusions?
- Does the student or team recognize the data's limitations?
- Does the student or team have any idea of what further work is warranted?

#### **Engineering Goals**

- Does the project have a clear objective?
- Is the solution workable? (i.e., acceptable to the potential user?)
- Does the solution represent a potential improvement over previous alternatives?

### **Thoroughness (15 Points; 12 Points)**

- Did the student or team carry out the project to completion within the scope of the original aims?
- How completely was the problem covered?
- Are conclusions based on a single experiment or replication?
- Can the student explain uncertainties in the data?
- How complete are project notes?

### **Skill (15 Points; 12 Points)**

- Does the student or team have the skills required to do all the work necessary to obtain the data that support the objectives?
- Was the project carried out under the supervision of an adult, or did the student work largely on his/her own?
- Where did the equipment come from? Was it built or found independently by the student or team?

### **Clarity (10 Points)**

- 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?
- Are the important phases of the project presented in an orderly manner?
- How clearly are the results presented?
- How well does the display contribute to the explanation of the project?
- Does the student make use of the display in explaining the question?

### **Teamwork (Team Projects Only; 16 Points)**

- Are the tasks and contributions of each team member clearly outlined?
- Was each team member fully involved with the project, and is each member familiar with all aspects?
- Does the final work reflect the coordinated efforts of all team members?

