



EXPERIMENT JUDGING SHEET

1. Project Thoroughness (Weight of x2)

Conclusions of the project are based on the trials conducted. The student can discuss the project at length and can talk “nuts and bolts.” The student can talk about two or more future experiments based on what was learned. It is clear that the student researched the topic using at least one outside source. A bibliography is present.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total: (x2) |
|---|---|---|---|---|---|---|---|---|----|-------------|
| Shows limited knowledge of project. Incomplete or just one trial. No outside research was done. | | | Shows some knowledge of project. Conducted some duplicate trials. Research from one or more sources cited | | | | Thorough knowledge of project. Trials were all duplicate or more. Three or more research sources cited. | | | |

2. Scientific Methodology (Weight of x2)

The student can identify all the obvious variables and controls in the project. The student can discuss how these variables can affect the outcome of the project. The student recognizes major potential sources of error with their project.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total: (x2) |
|--|---|---|--|---|---|---|--|---|----|-------------|
| Shows little to no understanding of controls, variables or potential errors. | | | Shows some understanding of, controls variables, and potential errors. | | | | Shows strong understanding of variables and controls. Comprehends potential errors | | | |

3. Understanding of Scientific Subject (Weight of x3)

The student understands the scientific principle and concept of the project. Judges will evaluate this category mostly through the interview with the student. Grand prize winners will have thorough grade-appropriate understanding of the science of their project subject.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total: (x3) |
|--|---|---|---|---|---|---|--|---|----|-------------|
| Shows no real understanding of the subject of the project. | | | Understands some aspects of the subject chosen and some of the scientific concepts. | | | | Shows strong understanding of project subject and science of it. | | | |

4. Creativity (No additional weight)

Project (whether kit or self-created) was directed by student. This information will mainly be gleaned by the interview process. If self-created, the project design was clearly student driven. If a kit, student clearly led the project.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total: |
|---|---|---|---|---|---|---|---------------------------------------|---|----|--------|
| Project shows little or no evidence of student direction. | | | Project shows some evidence of student direction. | | | | Project was clearly student directed. | | | |

5. Clarity (No additional weight)

The project is clearly explained on the display board. Each step of the Scientific Method (Problem/Question, Hypothesis, Procedure, Results, Conclusion) is present and clear. Variables are present and defined. Controls, if needed, are present. Results are clearly presented and support the conclusion. Conclusion contains clear and direct answers to the hypothesis. Clarity should be viewed in the context of the age and experience of the child.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total: |
|---|---|---|---|---|---|---|---|---|----|--------|
| No steps presented. Project is incoherent. Cannot follow thought process. | | | Some steps of the Method are present. Some variables are defined. Some thought process, but not well-defined. | | | | All steps of the Method are present. Controls and variables are present and clearly written. Project is clear and well thought out. | | | |

6. Display Quality (No additional weight)

Project indicates thought, time and care in preparation and organization. The presentation is clearly written and easy to read and understand. The presentation is in a forthright manner, without tricks or inappropriate gadgets. Few spelling errors. No preference is given to hand-written or computer-generated graphics, pictures or displays.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total: |
|---|---|---|---|---|---|---|--|---|----|--------|
| Display was slapped together. No care was taken in its preparation. | | | Evidence of care and organization in the preparation of this display. | | | | Display shows a high level of care and organization. | | | |

GRAND TOTAL POINTS:
100 total possible points



DEMONSTRATION JUDGING SHEET

1. Project Thoroughness (Weight of x3)

Conclusions of the project are based on the trials conducted. The student can discuss the project at length and can talk “nuts and bolts.” Judge may need to coax a shy child. The student can talk about two or more future projects based on what was learned. It is clear that the student researched the topic using at least one outside source. A bibliography is present.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total: (x3) |
|---|---|---|--|---|---|---|---|---|----|-------------|
| Shows limited knowledge of project. Incomplete or just one trial. No outside research was done. | | | Shows some knowledge of project. Conducted some duplicate trials. Research from one or more sources cited. | | | Thorough knowledge of project. Trials were all duplicate or more. Three or more research sources cited. | | | | |

2. Understanding of Scientific Subject (Weight of x4)

The student understands the scientific principle and concept of the project. Judges will evaluate this category mostly through the interview with the student. Grand prize winners will have thorough grade-appropriate understanding of the science of their project subject.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total: (x4) |
|--|---|---|---|---|---|---|---|---|----|-------------|
| Shows no real understanding of the subject of the project. | | | Understands some aspects of the subject chosen and some of the scientific concepts. | | | Shows strong understanding of project subject <u>and</u> science of it. | | | | |

3. Creativity (No additional weight)

Project (whether kit or self-created) was directed by student. This information will mainly be gleaned by the interview process. If self-created, the project design was clearly student driven. If a kit, student clearly led the project.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total: |
|---|---|---|---|---|---|---------------------------------------|---|---|----|--------|
| Project shows little or no evidence of student direction. | | | Project shows some evidence of student direction. | | | Project was clearly student directed. | | | | |

4. Clarity (No additional weight)

The project is clearly explained on the display board. Each step of the Demonstration Method (Introduction, Procedure, Results, Conclusion) is present and clear. Results are clearly presented and support the conclusion. Conclusion contains a clear and direct summary of the scientific principle. Clarity should be viewed in the context of the age and experience of the child.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total: |
|---|---|---|---|---|---|---|---|---|----|--------|
| No steps presented. Project is incoherent. Cannot follow thought process. | | | Some steps of the Method are present. Some thought process, but not well-defined. | | | All steps of the Method are present. Project is clear and well thought out. | | | | |

5. Display Quality (No additional weight)

Project indicates thought, time and care in preparation and organization. The presentation is clearly written and easy to read and understand. The presentation is in a forthright manner, without tricks or inappropriate gadgets. Few spelling errors. No preference is given to hand-written or computer-generated graphics, pictures or displays.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total: |
|---|---|---|---|---|---|--|---|---|----|--------|
| Display was slapped together. No care was taken in its preparation. | | | Evidence of care and organization in the preparation of this display. | | | Display shows a high level of care and organization. | | | | |

GRAND TOTAL POINTS:
100 total possible points