



The OHIO ACADEMY of SCIENCE
 Science Day Judging Card – All Projects Year 2024

Local Fair Name: _____ or District Name: _____ # _____

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FOR TEAM PROJECTS: IN EACH OF THE FOUR SECTIONS OF THE JUDGING RUBRIC YOU MAY CONSIDER HOW TEAMWORK PLAYED A PART AND CONSIDER WHEN ASSIGNING POINTS. THERE IS NO SEPARATE JUDGING SECTION WITH POINTS FOR TEAMWORK.

Consider how group functioned as a team? Was a team effort used to complete this project?

Did all members of the team show an understanding and active participation in the entire project?

All members of the team participate equally in the presentation of project; correctly and clearly answering questions.

| | | | |
|--|---|----------------------|------|
| SECTION #1: ORAL, WRITTEN, AND VISUAL COMMUNICATION: Tell me about your project? May I see your report? <i>Judges are encouraged to consider student abilities (or potential disabilities) in all three types of communication when assigning points</i> | Superior (Exceeds) | Excellent (Meets) | Good |
| <i>Written:</i> Final Research Report (includes relevant background information, research question and testable hypothesis, experimental design and procedures, data acquisition techniques, data analysis, conclusion and works cited). <i>For Engineering Design projects, include an engineering design statement, design plan and discussion of prototype development and testing.</i> | | | |
| <i>Oral:</i> Correct and concise explanation of project, design, and analysis. Responses reflect accurate understanding of experimental results and limitations of, expansions of, and/or impact of project. | | | |
| <i>Visual:</i> Logical organization of material, neatly displayed, graphics and legends appropriate to project, easy to read and understand. Photos and graphics cited. | | | |
| Comments /Feedback – SUPERIOR (9-10) EXCELLENT (6-7-8) GOOD (0-5) | Points Earned: _____/10 | | |
| SECTION #2: ORIGINALITY: Where did you get the idea for your project, experimental design, and analysis? What interests you about this topic? Did you modify any designs that you found and if so, how? | Superior (Exceeds) | Excellent (Meets) | Good |
| Project displays originality in concept, relative to grade level (i.e. not "cookbook", not classroom lab, not a simple extension of "found" idea). The project is a new idea, concept, principle, insight, or non-obvious approach. There is novel association or relationship of previous knowledge and particularly rigorous analyses that reveals previously unknown relations, etc. | | | |
| Comments /Feedback – SUPERIOR (5) EXCELLENT (4) GOOD (0-3) | Points Earned: _____/5 | | |

| SECTION #3: EXPERIMENTAL DESIGN: <i>What question are you trying to answer and how did you decide to go about answering it? What did you learn from the data? IF ENGINEERING DESIGN: What design problem are you trying to address and how did you decide to go about addressing it?</i> | Superior (Exceeds) | Excellent (Meets) | Good |
|--|---|----------------------|------|
| Project addresses a clear, focused problem or question with hypothesis that is testable using scientific methods. <i>If Meta-Analysis project, then hypothesis is testable using data from multiple peer-reviewed research papers. If Engineering Design project, addresses a clear, focused engineering design problem or need; criteria for success are identified; preliminary designs prepared; prototype is created and tested with results clearly communicated.</i> | | | |
| Project plan and data collection methodology identifies variables and controls and is not a summary of already known science. <i>If Engineering Design project, student identifies and applies established engineering principles in their design.</i> | | | |
| Reproducible and sufficient data are collected, or <i>if Meta-Analysis project, sufficient amount of scientific data is synthesized from other sources to address question/problem.</i> Data used were collected using appropriate and safe scientific protocols. <i>If Engineering Design project, student used materials and processes effectively to correctly build prototype or model.</i> | | | |
| Data are properly analyzed. Appropriate graphs and/or tables illustrate the data. Statistics appropriate to the age of student are correctly used. <i>If Engineering Design project, sufficient testing of prototype or model is completed; data is properly measured, presented and analyzed.</i> | | | |
| Includes discussion of results and forms valid conclusions reached from the data obtained with sources of error identified. <i>If Engineering Design, prototype successfully meets criteria that were established for the project.</i> | | | |
| Comments /Feedback – | Points Earned: | | |
| | SUPERIOR (14-15) EXCELLENT (11-12-13) GOOD (0-10) | | |
| | _____/15 | | |
| SECTION #4: DEPTH OF UNDERSTANDING: <i>What did you learn about the science behind your project before and during the experiment? If Engineering Design - What did you learn about the engineering and previous designs for your project before and during the process?</i> | Superior (Exceeds) | Excellent (Meets) | Good |
| Adequate age-appropriate background research (journals, textbooks, websites, etc.) relevant to the project which provides basis for hypothesis and age-appropriate use of terms and principles. | | | |
| Supplements answers with relevant information reflecting knowledge gained during the project. | | | |
| Describes how project applies to the student, the community and the natural world (i.e. the “why” would this project be important for people to know). | | | |
| Age appropriate exploration of science in subject, depth of investigation, and/or sophistication of project. | | | |
| Comments /Feedback – | Points Earned: | | |
| | SUPERIOR (9-10) EXCELLENT (6-7-8) GOOD (0-5) | | |
| | _____/10 | | |

| Total Points Earned (completed by judges) | Overall Rank (CIRCLE) |
|--|--|
| Section 1 _____ / 10 | Superior (36 - 40) Excellent (24-35) Good (0-23) |
| Section 2: _____ / 5 | |
| Section 3 _____ / 15 | |
| Section 4 _____ / 10 | |
| Total _____ / 40 | |