
Southern MN Regional Science & Engineering Fair Judge Guidelines

The following evaluation criteria will be used for judging at the Southern MN Regional Science & Engineering Fair. It has been extensively reviewed and revised by the Judge Advisory Committee of Intel International Science & Engineering Fair (with whom the Southern MN Regional Science and Engineering Fair is affiliated) with additional input from science, engineering, and educational experts.

As shown below, both criteria have five sections as well as suggested scoring for each section. Each section includes key items to consider for evaluation both before and after the interview. Students are encouraged to design their posters in a clear and informative manner to allow pre-interview evaluation and to enable the interview to become an in-depth discussion. Judges should examine the student notebook and, if present, any special forms such as Form 1C (Regulated Research Institution/Industrial Setting) and Form 7 (Continuation of Projects). Considerable emphasis is placed on two areas: Creativity and Presentation, especially the Interview section, and are discussed in more detail below.

Creativity: A creative project demonstrates imagination and inventiveness. Such projects often offer different perspectives that open up new possibilities or new alternatives. Judges should place emphasis on research outcomes in evaluating creativity.

Presentation/Interview: The interview provides the opportunity to interact with the finalists and evaluate their understanding of the project's basic science, interpretation and limitations of the results and conclusions.

- If the project was done at a research or industrial facility, the judge should determine the degree of independence of the finalist in conducting the project, which is documented on Form 1C.
- If the project was completed at home or in a school laboratory, the judge should determine if the finalist received any mentoring or professional guidance.
- If the project is a multi-year effort, the interview should focus **ONLY** on the current year's work. Judges should review the project's abstract and Form 7 (Intel ISEF Continuation Projects) to clarify what progress was completed this year.
- *Please note that both team and individual projects are judged together, and projects should be judged only on the basis of their quality. However, all team members should demonstrate significant contributions to and an understanding of the project.*

Southern MN Regional Science & Engineering Fair Engineering Design Criteria

Do NOT give this SCORE sheet back to the student. Ribbon judging is conducted using a 100-point scale with points assigned to the Research Question, Design & Methodology, Execution (Data Collection, Analysis and Interpretation), Creativity, and Presentation (Poster and Interview).

Student Name(s): _____

Project #: _____ Grade: _____ Judge Initials: _____ Judging Team: _____

Scoring Criteria	Points Possible	Points Awarded
Research Problem Description of a practical need or problem to be solved; definition of criteria for proposed solution; explanation of constraints	10	
Design and Methodology Exploration of alternative to answer need or problem; identification of a solution; development of a prototype/model.	15	
Execution: Construction and Testing Prototype demonstrates intended design; has the prototype been fully tested in multiple conditions/trials; does it demonstrate engineering skill and completeness.	20	
Creativity Project demonstrates significant creativity in one or more of the above criteria	20	
Presentation: Poster Logical organization of material; clarity of graphics and legends; supporting documents displayed	10	
Presentation: Interview Clear, concise, and thoughtful responses to questions; understanding of basic science relevant to project; understanding interpretation and limitations of results and conclusions; degree of independence in conducting the experiment; recognition of potential impact in science, society and/or economics; quality of ideas for further research. For Team Projects: contributions to and understanding from all team members.	25	
TOTAL POINTS	100	

RIBBON POINTS

Purple Ribbon= 85-100
 Blue Ribbon= 70-84
 Red Ribbon= 55-69
 Green Ribbon=0-54

Judges' Comment Form for Project - TEAM / INDIVIDUAL

*Note: This sheet WILL be returned to the students and will be the only written feedback they get from the judges.
Please make at least one constructive comment in each section. Use the back of this sheet if necessary.*

Student name(s): _____

Project #: _____ Grade: _____ Judge Initials: _____ Judging Team: _____

PROJECT DESIGN Questions asked are student-initiated and original; Clear and unambiguous statement of problem; clearly defined procedural plan for obtaining a solution; variables clearly recognized and defined; proper controls used correctly; data adequately supports students' conclusions; limitations recognized; scientific literature cited

THOROUGHNESS Original question was completely addressed; conclusions are based on repeated observations (not single experiments); project notes / lab notebook are complete; students are aware of alternate approaches or theories, Data was obtained & analyzed appropriately by student; students worked largely independently; students have required skills/understanding to continue research on own

PRESENTATION Clear discussion of project (not a memorized speech); written material/poster reflects understanding of research project; data and results are presented clearly; presentation is forthright; students designed and created poster largely independently