

Judging Criteria

Please keep in mind we are judging:

- A secondary school student's work and not a Ph.D. candidate or a professional.
- A project compared with other projects exhibited and not with projects seen elsewhere under other circumstances.

Research Project Criteria and Point Distribution

1. Creative Ability (30 points)

Does the project show creative ability and originality in the:

- Question asked?
- Approach to solving the problem?
- Analysis of the data?
- Interpretation of the data?
- Use of equipment?
- Construction and design of new equipment?

2. Scientific Method/Engineering Design (30 points)

- Is the problem clearly stated?
- Is the problem sufficiently limited or is it too simple?
- Were procedures clearly stated?
- Were variables recognized?
- If controls were necessary, were they correctly used? Are there limitations of data recognized?
- Is scientific literature cited?
- For engineering projects, is the solution workable, acceptable to the potential user and economically feasible?

3. Thoroughness and Knowledge of Concepts (15 points)

- Were the purposes achieved?
- Was the problem researched thoroughly?
- Were the data adequate to support the conclusion?
- Were test procedures complete?

4. Competence/Skills (15 points)

- Does the student show evidence of laboratory, computational, observation and design skills?
- How much assistance did the student receive?
- Is the workmanship neat and accurate?

5. Communication/Clarity (10 points)

- Is the student able to explain the project in a clear and concise manner?
- Is the written material expressed well by the student?
- How well does the exhibit explain itself?
- Is there good use of visuals, e.g., pictures, charts, photographs, graphs?

Display Project Criteria and Point Distribution

1. Creative Ability (20 points)

Does the project show originality in:

- The question asked?
- Their method of explaining or demonstrating?

2. Scientific and Technical Accuracy/Thoroughness (20 points)

- Does the student understand the scientific principles involved?
- Are scientific terms properly used?
- Does the project carry out its purposes?
- Was the problem studied thoroughly?

3. Instructional Value/Significance (15 points)

- Is the information accurate?
- Is the display effective in teaching?
- Is the content significant?

4. Dramatic Value/Visual Quality (15 points)

- Is the display attractive?
- Does the display involve the viewer?
- Is there good use of visuals, e.g., pictures, charts, photographs, graphs?

5. Communication (15 points)

- Is the principle or problem clearly described and explained?
- Does the project show good use of language?
- Is the exhibit self-explanatory? Easily readable?
- Good use of visuals?

6. Craftsmanship/Skills & Competence (15 points)

- Does the student have the skills required to do all the work necessary?
- How much assistance did the student receive?
- Is the workmanship neat and accurate?

Project Divisions

Projects at the school, district, and state fairs may be divided into two project categories: Research and Display.

Research projects are those involving laboratory, field or theoretical work and not just library research.

Display projects explain or demonstrate a scientific principle or problem, usually involving library research. At the State Fair, only research projects are accepted in the Senior Division (grades 9-12). The Junior Division (grades 6-8) consists of both Research and Display projects.