



Louisville Regional Science & Engineering Fair

lrsef.org • info@lrsef.org • P.O. Box 8184 Louisville, KY 40257

Judging Criteria For all Category Projects

I. Research Question (for Science) or Research Problem (for Engineering): 10 points

Science

- Clear and focused purpose
- Identifies contribution to field of study
- Testable using scientific methods

Engineering

- Description of a practical need or problem to be solved
- Definition of criteria for proposed solution
- Explanation of constraints

II. Design and Methodology: 15 points

Science

- Well-designed plan and data collection methods
- Variables and controls defined, appropriate and complete

Engineering

- Exploration of alternatives to answer need or problem
- Identification of a solution
- Development of a prototype/model

III. Execution: 20 points

Science

- Systematic data collection and analysis
- Reproducibility of results
- Appropriate application of mathematical and statistical methods
- Sufficient data collected to support interpretation and conclusions

Engineering

- Prototype demonstrates intended design
- Prototype has been tested in multiple conditions/trials
- Prototype demonstrates engineering skill and completeness

IV. Creativity: 20 points

- Project demonstrates significant creativity in one or more of the above criteria

V. Presentation: 35 points

- Presentation Materials (10 points)
 - Logical organization of material
 - Clarity of graphics and photographs
 - Credits and documentation is notated on materials
- Interview (25 points)
 - Clear, concise, through responses to questions
 - Understanding of basic science relevant to project
 - Understanding interpretation and limitations of results and conclusions
 - Degree of independence in conducting project
 - Recognition of potential impact in science, society and/or economics
 - Quality of ideas for further research
 - For team projects, contributions to and understanding of project by all members