



JUDGING CRITERIA JUNIOR / SENIOR DIVISION

Judging Criteria for Science Projects

I. Research Question (10pts)

clear and focused purpose
identifies contribution to field of study
testable using scientific methods

II. Design and Methodology (15pts)

well designed plan and data collection methods
variables and controls defined, appropriate and complete

III. Execution -Data Collection, Analysis and Interpretation (20 pts)

systematic data collection and analysis
reproducibility of results
appropriate application of mathematical and statistical methods
sufficient data collected to support interpretations and conclusions

IV. Creativity (20pts)

project demonstrates significant creativity in one or more of the above criteria

V. Presentation (35 pts)

a. Poster (10pts)

logical organization of material
clarity of graphics and legends
supporting documentation displayed

b. Interview (25pts)

clear, concise, thoughtful responses to questions
understanding of basic science relevant to project
understanding interpretation and limitations of results and conclusions
degree of independence in conduction of 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

Judging Criteria for Engineering Projects

I. Research Question (10 pts)

description of a practical need or problem to be solved
definition of criteria for proposed solution
explanation of problem constraints

II. Design and Methodology (15pts)

exploration of alternatives to answer, need, and/or problem
Identification of a solution
development of a prototype/model

III. Execution- Construction and Testing (20 pts)

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

IV. Creativity (20pts)

project demonstrates significant creativity in one or more of the above criteria

V. Presentation (35 pts)

a. Poster (10pts)

logical organization of material
clarity of graphics and legends
supporting documentation displayed

b. Interview (25pts)

clear, concise, thoughtful responses to questions
understanding of basic science relevant to project
understanding interpretation and limitations of results and conclusions
degree of independence in conduction of 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