2024 Minnesota State Science & Engineering Fair Judge Rubric

Please remember this is only for notes - scores must be submitted online by 7 p.m.

Project ID: _____   Keywords in title: _____

10% - Research Question/ Problem: 10 pts	Score -enter in zFairs (1=low, 10=high)
Science projects - Clear and focused purpose or practical problem to be solved - Project contributes to field of study - Testable using scientific methods Engineering or software projects - Describes practical need or problem to be solved - Defines criteria for proposed solution - Explains constraints	

15% - Design and Methodology: 15 pts	Score - enter in zFairs (1=low, 15=high)
Science projects - Well-designed plan and data collection methods, including quantity of data collected - Variables and controls defined, appropriate and complete Engineering or software projects - Explores alternatives to answer need or problem - Identifies a solution - Develops a prototype/model	

20% - Execution: Data Collection, Analysis and Interpretation/ Construction and Testing: 20 pts	Score - enter in zFairs (1=low, 20=high)
Science projects - Systematic data collection and analysis - Reproducibility of results - Appropriate application of mathematical and statistical methods - *remember that middle schoolers may have minimal math skills* - Sufficient data collected to support interpretation and conclusions Engineering or software projects - Prototype demonstrates intended design - Prototype has been tested in multiple conditions/trials - Prototype demonstrates engineering skill and completeness	

20% - Creativity: 20 pts	Score - enter in zFairs (1=low, 20=high)
All projects - Creative research question or engineering/software problem - Creative design and methodology - Creative data collection, analysis and interpretation	

10% - Poster: 10 pts	Score - enter in zFairs (1=low, 10=high)
All projects - Appropriate summary of project - Clarity and legibility of poster - Graphics and legends convey findings - Displays supporting documentation	

25% - In-person conversation: 25 pts	Score - enter in zFairs (1=low, 25=high)
All projects - Clear, concise and thoughtful responses to questions - Degree of independence in conducting project - Quality of ideas for further research - Recognition of potential impact in science, society and/or economics - Understanding of basic science or engineering relevant to project - Understanding of interpretation and limitations of results and conclusions Team projects - All members have contributed to and understand the project	