

MSU Billings Science Expo 2023

ENGINEERING JUDGING RUBRIC

Defining the Problem:

- Clear and concise problem identified ____/5
- Problem demonstrates original thought/innovation____/5

Science Concept:

- Student demonstrates clear understanding of the science ____/5
- Student identifies existing solutions or constraints to new idea ____/5

Planning and Design:

- Student presents a demonstration/model to explain concept Y N
- The plan and design accurately connect with the identified problem ____/5
- The quality of demonstration/model has thought and is constructed well ____/5
- Student's plan and design is clear and understandable ____/5
- Procedure is repeatable ____/5
- Variables are defined and used appropriately ____/5

Data Collection:

- Data reflects procedure accurately ____/5
- Data is presented in summative form ____/5
- Notebook/record keeping unit available Y N
- Procedure was conducted sufficient amount of times to gather data ____/5

Results/Conclusions

- Student identifies constraints and makes appropriate changes to plan ____/5
- Conclusion summarizes analyzed data ____/5
- Does the student propose new questions relating to the original problem? ____/5

Overall Presentation:

- All areas are presented:
(problem, research, plan, design, test, improve, data, results) ____/5
- Display all together is clear and organized____/5
- Student provided reliable sources ____/5
- Professional mannerisms, eye contact, clear speaking, student is engaged ____/5
- Evidence of student creativity____/5

Total Possible Points ____/100