Judge Name: _____

Project #_____ Title: _____

Massachusetts Science & Engineering Fair
Middle School Judging Rubric

Comments - *Remember to include written, constructive feedback, and suggestions for further study so students learn from the experience. Students will not see final scores, and only the comments you share will provide them with an opportunity to learn*

Scoring Key

0 - Missing	1 - Bottom Range	2 - Lower Range	3 - Mid Range	4 - Upper Range	5 - Top of the Range
Missing or Not Considered	Alluded to, but Not Sufficiently Discussed or Described	Present but Minimal or Lacking in Detail or Focus	Adequate	Solid Understanding, Lacks Specifics but Strong Overall	Complete, Thorough, and Significant

Emphasis on Method, Procedure, and Preparation **30 points**

Problem Statement: Did the student clearly describe a problem to solve or a question to answer?	0	1	2	3	4	5
Did the student demonstrate its connection to existing disciplines OR discuss the resolution's real-world relevance?	0	1	2	3	4	5
Background Research: Did the student complete background research into 3+ technical sources and demonstrate what they know when discussing the subject area and the process for their experiment?	0	1	2	3	4	5
Project Design: Did the student form a plan on how to resolve or explore the problem?	0	1	2	3	4	5
Execution: Did the student generate sufficient data to produce valid results, including running enough trials, controlling relevant variables, and performing statistical analysis?	0	1	2	3	4	5
Analysis: Were the student's conclusions consistent with all the data they collected, and did the student explain why some data was not relevant to collect?	0	1	2	3	4	5

Interpretation and Sense-making **20 points**

Did the student use their background research to analyze their results?	0	1	2	3	4	5
Did the student state the scope and limitations of their experiment or design?	0	1	2	3	4	5
Did the student show evidence that they learned how to improve their scientific approach by doing the project?	0	1	2	3	4	5
Is there evidence of thorough project development including attention to detail across all aspects of the project?	0	1	2	3	4	5

Emphasis on Flexibility, Learning, and Independence **25 points**

Independence: Did the student explain their interest or motivation to solve the problem? Did they come up with the idea on their own/as a student team?	0	1	2	3	4	5
Independence: Did the student (student team) lead the planning and implementation as much as they were able?	0	1	2	3	4	5
Flexibility: Did the method and procedure show flexibility in terms of solving the student's problem, especially considering the resources available to the student?	0	1	2	3	4	5
Learning: Did the student obtain sufficient results in data or prototypes to meet the expectations of the project?	0	1	2	3	4	5
Learning: Can the student explain potential future project improvements and extensions of their research?	0	1	2	3	4	5

Emphasis on Communication Skills and Presentation **25 points**

Oral Communication: Did the student's explanation of their results, conclusions, and overall project demonstrate an understanding of their project?	0	1	2	3	4	5
Visual Communication: Did the student's display include graphs, tables, or diagrams that are accurate, understandable, and relevant?	0	1	2	3	4	5
Technical Writing: Did the student put together an accurate project report (hardcopy or digital) that summarizes the project goal, process, and conclusions and includes a bibliography?	0	1	2	3	4	5
Documentation: Did the student maintain a well-documented lab notebook (hardcopy or digital) that includes plans, procedures, observations with dated entries, and conclusions in an appropriate format for the field?	0	1	2	3	4	5
Organization: Did the student's overall presentation (e.g., their talk, display, report, logbook, demo) display an organized overview of their project?	0	1	2	3	4	5

TOTAL SCORE

COMMENTS:

Area of Strength	Area for growth	Suggestion for future exploration