Massachusetts Science & Engineering Fair – State and Regional Fairs

High School

Judge Name: _____

Judge Score Card

Project #_____ Title: _____

Scoring Key:

Bottom Range	Lower range	Mid range	Upper range	Top of the range
Component missing, not present or exceedingly inadequate 0 = only if missing	Minimal information Lacks sufficient detail Lacks understanding	Limited understanding or scope, Adequate but insufficient understanding or explanation	Solid understanding Lacks a few specifics but well developed or explained overall	Complete, Thorough, Significant

1. Technical Approach and Method: 0-35 points _____

Science Research	Engineering and Computer Science	Mathematics	Points										
Statement of problem: Clearly Stated Hypothesis and Testable Question	Identified need or problem, possible solutions	Statement of need or problem and possible strategies for a solution	0	1		2		3		4		5	
Logical Experiment, with variables, control, and repetitions as appropriate	Implementation and testing of prototype or prototype software, program code	Identify a potential result, model, statistical technique, or theorem; Explain plausibility, rationale, or interest	0	1	2	3	4	5	6	7	8	9	10
Accuracy and thoroughness of data, including observations and adequate replication	Development of clear performance criteria – metrics for evaluating defined	Suggest an approach to a proof / justify a computational approach, including all assumptions	0	1		2		3		4		5	
Thoughtful analysis with appropriate use of graphs, tables, quantitative and/or statistical tests	Evaluation process involving redesign, retest, or added features, code, or algorithms – including performance assessment (graphs, tables, statistical methods)	Thoughtful analysis OR significant work on a proof (inductively or deductively) to justify a result	0	1	2	3	4	5	6	7	8	9	10
Conclusions consistent with testing and clearly stated	Well supported conclusions; may include a feasibility study.	Well supported results; Provide corollaries, applications, or utility	0	1		2		3		4		5	

2. Understanding of Science or Engineering: 0-20 points _____

	0	1	2	3	4	5
Knowledge of relevant literature- includes documented references, literature review	0	1	2	3	4	5
Application & understanding of method, process, and techniques. Ability to articulate why or how a process did or didn't work.	0	1	2	3	4	5
Connections to other disciplines, recognition of potential impact on society, and/or real-world relevance discussed	0	1	2	3	4	5

Implications for future study, further results, acknowledgement of constraints	0	1	2	3	4	5

3. Innovation/Creativity 0-20 points _____

	0	1	2	3	4	5				
Creative approach to problem-solving; Multiple attempts to improve experiment or project	0	1	2	3	4	5				
Unique use of Methods, Designs or Materials	0	1	2	3	4	5				
Degree of independence (individual or team) in conducting experiment or project – student-driven idea, planning, and implementation	0	1	2	3	4	5	6	7	8	9	10

4. Presentation 0-10 points

	0	1	2	3	4	5
Clear, concise and consistent presentation (For teams: Evidence of equitable collaboration)	0	1	2	3	4	5
Effectiveness and Use of Visual Display – organized, easy to read, clear use of graphics and charts	0	1	2	3	4	5

5. Supporting Documentation and Thoroughness 0-15 points

	0	1	2	3	4	5
Lab Report (Research Paper), with Bibliography/Citations, shows effective scientific writing and organization	0	1	2	3	4	5
Well-documented Lab Notebook – dated entries, appropriate format for the field, either digital or hardcopy accepted	0	1	2	3	4	5
Overall evidence of thorough project development including attention to detail across all aspects of the project	0	1	2	3	4	5

COMMENTS:

Remember to include written, constructive feedback and suggestions for further study so students learn from the experience. They will not see their scores so any comments you share provides an opportunity to learn.

TOTAL SCORE _____

Area of strength	*Area for growth*	*Suggestion for future exploration*