Region V Middle School Science & Engineering Fair
Judging Criteria and Scoring Methodology

This document is designed to clarify the scoring process for judges participating in the Regional Middle School Science & Engineering Fair. A sample of the actual scoring sheet and the specific criteria to be judged (as approved by the Massachusetts State Science & Engineering Fair, Inc.) can be found on the following page.

In order to best ensure equity when judging projects, we ask that judges use a scale of 0-100 when reviewing a student's Science Fair project. Utilizing the entire 100 point scale helps to create adequate differentiation among the projects. (*Please try your best not to fall into an academic scoring mentality, where an "A" is 93/100 or above and a failing grade is below 60/100. Note: Students do not receive their final scores or the individual score sheets from judges*.)

Understand that our goal is to make the Fair an enjoyable learning experience for all students. Judges need to be 1) supportive and encouraging, 2) equitable and 3) realistic. That said, you should keep in mind the following general guidelines as you assess criteria and score each individual student project (more specific can information can be found on the following page):

Total Score (out of 100)

0-20 – Poor (project not suitable for the State Fair)
- ✓ Shows little or no understanding of the scientific method/approach
- ✓ Lacks knowledge of the subject matter and understanding of research
- ✓ Not a creative, thorough, or well organized project; visual and oral presentation significantly lacking

21-40 – Below Average (project not suitable for the State Fair)

41-60 – Average (project has a slight chance of advancing to the State Fair)

61-80 – Above Average (project has a good chance of advancing to the State Fair)

81-100 – Excellent (project will advance to the State Fair)
- ✓ Follows a well-designed scientific approach, using data to support conclusions
- ✓ Shows complete understanding of the subject matter including supporting research and data
- ✓ A well organized, creative, and ingenuous project; highly-effective visual and oral presentation

NOTE: On average, we strive to send 40-50% of the projects to the State Fair in June – but this does not mean that exactly 50% of the projects you are assigned to judge are necessarily worthy of consideration at the State Fair. Projects are assigned randomly to judges and you may judge a wide variety of projects. Each student project will be scored by three judges and the average score will determine their place in the Regional Fair.

As always, many thanks for your support!

Project #: **Student/s:**

Project Name:

CRITERIA	***Be Supportive and Encouraging****	**Judge's Score (points)**
1. Scientific Approach ✓ Did the student start with a clearly stated hypothesis, purpose, or statement of an engineering goal? ✓ Was the student orderly and logical with the setup and follow-through of the project? ✓ Are the student's conclusions consistent with the data he or she collected?	0….5….10….15….20….25	**Up to 25 points _____**
2. Knowledge of Project Areas ✓ How effectively did the student conduct preliminary research? ✓ Is the explanation of the project clear and precise? ✓ What is the extent of the student's knowledge of materials related to the project? ✓ Is the student aware of both the scope and limitations of the project?	0….5….10….15….20	**Up to 20 points _____**
3. Thoroughness ✓ Is there evidence that the student used multiple sources in the literature search? ✓ Has thorough use been made of data and observations? ✓ How successfully has the original plan been followed through to completion?	0….5….10….15….20	**Up to 20 points _____**
4. Written Records and Report ✓ Has the student kept an original day-by-day notebook with all plans, procedures, observations, and conclusions for failures as well as successes? ✓ Has the student put together an accurate written report, complete with a bibliography?	0….5….10….15	**Up to 15 points _____**
5. Ingenuity and Creativity ✓ Did the student show originality of thought, design or implementation of the experiment? ✓ How well has the student used his or her materials in the solution of problems? ✓ Does the student present any new or unique ideas or interpretation of the data?	0….5….10….15	**Up to 15 points _____**
6. Visual Presentation ✓ Is the project displayed in a logical and organized manner? ✓ Have charts and graphs been used where needed? ✓ Does the display poster effectively convey the message in an understandable manner?	0….5	**Up to 5 points _____**

Judge's Name: **TOTAL SCORE (out of 100):**

Project #: **Comments for Student/s (optional):**