**Judge Scoring Rubric**

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| **Criteria for Technology Projects** | **Score** | **Criteria for Math Projects** |
| **Research Question**   * Application of a Tech concept/s to a real world situation * Definition of concepts that are needed in the application of this technology project |  | **Research Question**   * Application of a math concept/s to a real world situation * Definition of concepts and formulas that are needed in the application of this situation |
| **10 POINTS** |
| **Design and Methodology**   * Understanding of the appropriateness of the computer application chosen based on the real-world problem that needs solving * Clearly understand the processes involved in completing the chosen task |  | **Design and Methodology**   * Understanding of appropriate concepts to use in your chosen real word situation * Clear understanding of when during the application you are to use different concepts |
| **15 POINTS** |
| **Execution: Technological Proficiency**   * Demonstrates proficiency in performing a complex computer task * Program/Site/etc… works as intended |  | **Execution: Computational Accuracy**   * Project demonstrates one or more math concepts * Math work has been done correctly * Correct units are applied to your chosen situation |
| **20 POINTS** |
| **Creativity**   * Project demonstrates significant creativity in one or more of the above criteria |  | **Creativity**   * Project demonstrates significant creativity in one or more of the above criteria |
| **20 POINTS** |
| **Poster Display**   * Logical organization of materials * Clarity of graphics and legends * Supporting documents displayed |  | **Poster Display**   * Logical organization of materials * Clarity of graphics and legends * Supporting documents displayed |
| **10 POINTS** |
| **Interview**   * Clear, concise, thoughtful responses to questions * Understanding of basic math relevant to project * Understanding interpretation and limitations of results and conclusions * Degree of Independence in conducting project * Recognition of potential impact in science, society, and/or economics * Quality of ideas for further research * **For team projects, contributions to and understanding of project by all members** |  | **Interview**   * Clear, concise, thoughtful responses to questions * Understanding of basic math relevant to project * Understanding interpretation and limitations of results and conclusions * Degree of Independence in conducting project * Recognition of potential impact in science, society, and/or economics * Quality of ideas for further research * **For team projects, contributions to and understanding of project by all members** |
| **25 POINTS** |
|  |  |  |
| **100 TOTAL POINTS POSSIBLE** |

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| **Criteria for Science Projects** | **Score** | **Criteria for Engineering Projects** |
| **Research Question**   * Clear and focused purpose * Identifies contributions to the field of study * Testable using scientific methods |  | **Research Question**   * Description of a practical need or problem to be solved * Definition of criteria for proposed solution * Explanation of constraints |
| **10 POINTS** |
| **Design and Methodology**   * Well-designed plan and data collection methods * Variables and controls defined, appropriate and complete |  | **Design and Methodology**   * Exploration of alternatives to answer need or problem * Identification of a solution * Development of a prototype/model |
| **15 POINTS** |
| **Execution: Data Collection, Analysis, and Interpretation**   * Systematic data collection and analysis * Reproducibility of Results * Appropriate application of mathematical and statistical methods * Sufficient data collected to support interpretation and conclusions |  | **Execution: Computational Accuracy**   * Prototype demonstrates intended design * Prototype has been tested in multiple conditions/trials * Prototype demonstrates engineering skill and completeness |
| **20 POINTS** |
| **Creativity**   * Project demonstrates significant creativity in one or more of the above criteria |  | **Creativity**   * Project demonstrates significant creativity in one or more of the above criteria |
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| **Poster Display**   * Logical organization of materials * Clarity of graphics and legends * Supporting documents displayed |  | **Poster Display**   * Logical organization of materials * Clarity of graphics and legends * Supporting documents displayed |
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|  |  |  |
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