***2019 Science & Engineering Fair COMMENT SHEET***

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| **Name: Project Number:** **Project Title:**  |
| Please provide constructive feedback to students. *A copy of this form is provided to students and their teachers after the fair.* |
| **Most Projects** | **Engineering Projects**(may be applied to some projects in mathematics and computer science) |
| **I. RESEARCH QUESTION** * Clear and focused purpose
* Identifies contribution to field of study
* Testable using scientific methods
 | **I. RESEARCH PROBLEM*** Description of a practical need or problem to be solved
* Definition of criteria for proposed solution
* Explanation of constraints
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| **II. DESIGN & METHODOLOGY*** Well-designed plan and data collection methods
* Variables and controls defined, appropriate and complete
 | **II. DESIGN & METHODOLOGY*** Exploration of alternatives to answer need or problem
* Identification of a solution
* Development of a prototype/model
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| **III. EXECUTION: DATA COLLECTION, ANALYSIS & INTERPRETATION*** Systematic data collection and analysis
* Reproducibility of results
* Appropriate application of mathematical and statistical methods
* Sufficient data collection to support interpretation and conclusions
 | **III. EXECUTION: CONSTRUCTION & TESTING*** Prototype demonstrates intended design
* Prototype has been tested in multiple conditions/trials
* Prototype demonstrates engineering skill and completeness
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| **All Projects** |
| **IV. CREATIVITY*** Project demonstrates significant creativity/originality/inventiveness in one or more of the above criteria
* A creative project demonstrates imagination and inventiveness.  Such projects often offer different perspectives that open up new possibilities or new alternatives.  Emphasis should be placed on research outcomes.
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| **V-a. PRESENTATION – POSTER*** Logical organization of material
* Clarity of graphics and legends
* Supporting documentation well selected and displayed
 | **V-b. PRESENTATION – INTERVIEW*** Clear, concise, thoughtful responses to questions
* Understanding of basic science relevant to project
* Understanding of interpretation and limitations of results and conclusion
* 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 understandings of project by all members
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