***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 | |
| **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 | |
| **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 | |
| **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. | | |
| **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 |