

**Judging
Criteria:**

Outstanding: 5	Excellent: 4	Very Good: 3	Good: 2	Minimal: 1	Missing: 0
----------------	--------------	--------------	---------	------------	------------

EXPERIMENTAL PROJECTS

<u>Category 1</u>	Methodology & Project Design	<p>The experiment research question was well defined; a hypothesis is made.</p> <p>All variables and controls are well defined and appropriate.</p> <p>The scope and limitations of the project are recognized by the exhibitor.</p> <p>The experimental design is presented in detail and is reproducible and efficient.</p> <p>Appropriate use of equipment and materials, including surveys, is evident.</p>
<u>Category 2</u>	Data Collection	<p>Extensive, relevant data are collected.</p> <p>Data are clearly presented with appropriate units.</p> <p>Extensive observations and notes are recorded.</p> <p>Data collection is done with consistent and repeatable methods.</p>
<u>Category 3</u>	Data Presentation & Analysis	<p>Data are presented in visual form using graphics, tables, diagrams, models, etc.</p> <p>Data are evaluated for relevance to original problem.</p> <p>The data are used to answer the experimental question.</p> <p>The relationships between variables are clearly discussed and supported with data and observations.</p> <p>The hypothesis is accepted or rejected and discussed.</p>
<u>Category 4</u>	Background & Topic Information	<p>Evidence of significant research is provided including a bibliography.</p> <p>All terms and concepts relating to the project are defined.</p> <p>Exhibitor is able to discuss topic with ease.</p>
<u>Category 5</u>	Presentation of Project	<p>The project presentation is neat and visually pleasing.</p> <p>Information on the project presentation is well organized.</p> <p>Writing on the project presentation has appropriate details, correct grammar and spelling.</p> <p>Sufficient information on all aspects of the project presentation is provided.</p>
<u>Category 6</u>	Creativity and Ingenuity	<p>The methodology of the project is original and creative.</p> <p>The exhibitor shows a clear interest in the nature of the project.</p> <p>A unique approach to problem solving is shown.</p>

**Judging
Criteria:**

Outstanding: 5	Excellent: 4	Very Good: 3	Good: 2	Minimal: 1	Missing: 0
----------------	--------------	--------------	---------	------------	------------

ENGINEERING PROJECTS

<u>Category 1</u>	Project Design	<p>The design brief is well defined, clearly worded, with measurable performance goals.</p> <p>Scope and limitations of project are recognized by the exhibitor.</p> <p>Engineering design is presented in detail and is reproducible and efficient.</p> <p>Appropriate use of equipment and material is displayed.</p>
<u>Category 2</u>	Documentation of Design Process	<p>Documentation is clearly presented with details and diagrams.</p> <p>A discussion of considerations that influenced end design of the final product.</p> <p>A flow chart describing factors that lead to final design is included.</p> <p>Suggestions are given for further modifications and feature enhancement.</p>
<u>Category 3</u>	Evaluation and Testing	<p>Proof that device works in a reproducible manner is presented.</p> <p>Flow chart or other evidence demonstrating how device meets the stated design brief.</p> <p>Evaluation of the extent to which the solution solves the stated design problem and why other alternative designs were not pursued.</p>
<u>Category 4</u>	Background & Topic Information	<p>Evidence of significant research is provided including a bibliography.</p> <p>All terms and concepts relating to the project are defined.</p> <p>Exhibitor is able to discuss topic with ease</p>
<u>Category 5</u>	Presentation of Project	<p>The project presentation is neat and visually pleasing.</p> <p>Information on the project presentation is well organized.</p> <p>Writing on the project presentation has appropriate details, correct grammar and spelling.</p> <p>Sufficient information on all aspects of the project presentation is provided.</p>
<u>Category 6</u>	Creativity and Ingenuity	<p>The methodology of the project is original and creative.</p> <p>The exhibitor shows a clear interest in the nature of the project.</p> <p>A unique approach to problem solving is shown.</p>