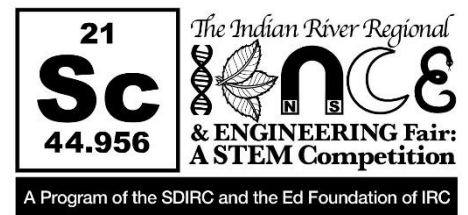


Secondary Judge Rubric



| Science Projects | STEM/Engineering Projects |
|---|---|
| <p>Research Question (10 Points)</p> <ul style="list-style-type: none"> • Clear and focused purpose • Hypothesis is testable • Identifies contribution to field of study | <p>Research Question (10 Points)</p> <ul style="list-style-type: none"> • Description of a practical need or problem to be solved • Definition of criteria for proposed solution • Explanation of constraints |
| <p>Design and Methodology (15 Points)</p> <ul style="list-style-type: none"> • Well-designed plan and data collection methods • Variables (including independent and dependent) and controls are defined, appropriate and complete | <p>Design and Methodology (15 Points)</p> <ul style="list-style-type: none"> • Exploration of alternatives to answer a need or problem • Identification of solution • Development of prototype or model |
| <p>Execution, Construction, Testing (20 Points)</p> <ul style="list-style-type: none"> • Systematic data collection and analysis • Reproducibility of results • Appropriate application of math and statistical methods • Sufficient data collected to support analysis and conclusion (minimum 3-5 replicates) | <p>Execution, Construction, Testing (20 Points)</p> <ul style="list-style-type: none"> • Prototype demonstrates intended design • Prototype tested multiple times (minimum 3 to 5 times) • Prototype demonstrates design skill and completeness |
| All Projects | |
| <p>Creativity (10 Points)</p> <ul style="list-style-type: none"> • Project demonstrates creativity in one or more of the above criteria | |
| <p>Display Board (10 Points)</p> <ul style="list-style-type: none"> • Logical organization of material • Clarity of graphics and legends • Supporting documentation displayed with abstract | |
| <p>Logbook and/or Evidence of Research (15 Points)</p> <ul style="list-style-type: none"> • Data collected reflects accurate information • Data and research are sufficient to be able to arrive at a reasonable conclusion | |
| <p>Interview (20 Points)</p> <ul style="list-style-type: none"> • Clear, concise, thoughtful responses to questions • Understanding of basic science related to project • Quality of ideas for future research • Degree of independence in conducting project • Interprets the results and conclusions with clarity • Recognition of potential impact in science/society | |