

# Gwinnett Regional Science & Engineering Fair Project Evaluation Form

Adapted from Georgia Science & Engineering Fair Scoring Sheet

**Sample Overall Ranges to Consider:** 0 - 59 (Below Average); 60 - 79 (Average); 80 - 93 (Above Average); 94 - 97 (Outstanding/State Quality); >98 (Exceptional/ISEF Quality)

<b>Judging Categories</b>	<b>Science Projects</b> (may be applied to projects the focus on research, investigation, scientific method)	<b>Engineering Projects</b> (may be applied to projects with a designed prototype device or prototype computer program)	<b>Below Average</b>	<b>Average</b>	<b>Above Average</b>	<b>Outstanding</b>
<b>Research Question or Problem</b>  Total Points: 10	<ul style="list-style-type: none"> <li>● clear and focused purpose</li> <li>● identifies a specific/significant contribution to field of study/significance</li> <li>● testable using scientific methods</li> </ul>	<ul style="list-style-type: none"> <li>● description of a practical or significant need or problem to be solved</li> <li>● definition of criteria for proposed solution</li> <li>● explanation of constraints</li> </ul>	1 2 3	4 5 6	7 8	9 10
<b>Design and Methodology</b>  Total Points: 20	<b>Investigative Research Design &amp; Methods</b> <ul style="list-style-type: none"> <li>● well-designed plan and data collection methods</li> <li>● variables and controls defined, appropriate and complete</li> <li>● reproducibility of methods/procedure / multiple trials conducted</li> </ul>	<b>Engineering Design &amp; Methods</b> <ul style="list-style-type: none"> <li>● identification of a problem needing to be solved and the impact the problem has on an entity (ex: individuals, the environment, etc)</li> <li>● exploration of existing options/alternatives to solve the problem</li> <li>● identification of a solution and rationale behind why the designed solution will meet the need for the problem</li> <li>● design and development of of a prototype, simulation, or model including iterations and modifications based on trials and constraints</li> </ul>	3 4 5 6 7	8 9 10 11 12	13 14 15 16 17	17 18 19 20

<p><b>Execution of Project</b></p> <p>Total Points: 20</p>	<p><b>Data Collection, Analysis &amp; Interpretation</b></p> <ul style="list-style-type: none"> <li>• systematic data collection and analysis (student can articulate their process and findings)</li> <li>• reproducibility of results (multiple trials)</li> <li>• appropriate application of mathematics and statistical methods as applicable for student’s grade level and development (see Math guidance document)</li> <li>• claim(s)/conclusion(s) are accurate and sufficient evidence, data, and statistics support conclusion(s)</li> </ul>	<p><b>Construction &amp; Testing</b></p> <ul style="list-style-type: none"> <li>• prototype demonstrates intended design and can be tested</li> <li>• prototype has been tested in multiple conditions/trials</li> <li>• prototype demonstrates engineering skill, design, and function</li> <li>• claim(s) about the prototype</li> </ul>	3 4 5 6 7	8 9 10 11 12	13 14 15 16 17	17 18 19 20
<p><b>Innovation</b></p> <p>Total Points: 20</p>	<ul style="list-style-type: none"> <li>• project demonstrates significant creativity/originality/inventiveness in approach, design and/or execution <ul style="list-style-type: none"> <li>○ project uses original or creative ways to investigate a phenomena, problem, and/or develop a solution</li> <li>○ Project results in a creative application of project results or a creative solution to a problem</li> </ul> </li> <li>• project provides new learning, new solutions and new questioning in an authentic way</li> </ul>	3 4 5 6 7	8 9 10 11 12	13 14 15 16 17	17 18 19 20	
<p><b>Project Board</b></p> <p>Total Points: 5</p>	<ul style="list-style-type: none"> <li>• logical organization of material professional looking, clear</li> <li>• supporting graphs/charts/documentation, images, and information is easy to understand</li> </ul>	1	2	3 4	5	
<p><b>Presentation</b></p> <p>Total Points: 25</p>	<ul style="list-style-type: none"> <li>• clear, concise, thoughtful ability to explain the project without reading notes/reading off the project board</li> <li>• explains the scientific/engineering principles relevant to project using</li> </ul>	7 8 9 10	11 12 13 14 15 16 17	18 19 20 21 22	23 24 25	

	<p>appropriate terminology, but in their own words</p> <ul style="list-style-type: none"> <li>• understanding of interpretation and limitations of results and conclusions or constraints of conclusion or prototype</li> <li>• clear degree of independence in conducting project; able to respond to questions with authentic, on the spot answers</li> <li>• recognition of potential impact in science, society and/or economics</li> <li>• quality of ideas for further research</li> <li>• authentic and demonstrative answers to questions; uses data and application of scientific principles to provide reason</li> <li>• for team projects, contributions to and understanding of project by all members</li> </ul>				
<b>TOTAL</b> (Out of 100)	(Final scores are submitted through the digital scoring form - link)				

**Summary Judgment:** In your opinion, should this project advance to the state level competition? **Yes No Maybe**  
 In your opinion, should this project advance to the Regeneron International Science & Engineering Fair? [HS Only] **Yes No Maybe**

Teachers and students should consider these judging criteria when planning science projects and school-level fairs. They are based on the Regeneron ISEF and Georgia Science and Engineering Fair criteria. ISEF and GSEF offer a second set of criteria that may be applied to projects in engineering, mathematics and computer science, where appropriate, as included above.

Overall, the updated criteria emphasis include:

- Increased emphasis on the ability to discuss the project effectively during the oral presentation.
- Increased emphasis on originality of project topics and on research plans that demonstrate creativity, imagination, discovery, and inventiveness.