

Lakota Science and Engineering Fair

Engineering TEAM Project

January 27, 2023

Judges please indicate your evaluation of each subsection by placing a checkmark in the appropriate box.
The LSEF Team will assign the point values.

SECTION #1: ORAL, WRITTEN, AND VISUAL COMMUNICATION: <i>Tell me about your project? May I see your abstract? Judges are encouraged to consider student abilities (or potential disabilities) in all three types of communication when assigning points</i>	Superior (Exceeds)	Excellent (Meets)	Good
WRITTEN: Well documented design engineering notebook (sketches, photos, iterations, testing data, results and references) with clear statement of technical problem and criteria for success AND abstract (includes unambiguous title, organization, results, conclusions, reflections, correct grammar and spelling). Both documents are present.			
ORAL: Correct and concise explanation of project, design and analysis. Responses reflect correct understanding of the experimental results as well as limitations of expansions of, and/or impact of project.			
VISUAL: Logical organization of material, neatly displayed, graphics and legends appropriate to project, easy to read and understand. Photos and graphics cited. Includes required information.			
Comments/Feedback (Required):	Points Earned: ____/10 (points to be assigned by the LSEF Team)		
SECTION #2: ORIGINALITY: <i>Where did you get the idea for your project and prototype? Did you modify any designs that you found and if so, how?</i>	Superior (Exceeds)	Excellent (Meets)	Good
New idea, concept, principle, design, or non-obvious approach and/or a novel association or relationship of previous designs or knowledge. Consider grade level.			
Design effectively addresses problem or need creatively and is design-based rather than a summary of knowledge.			
Comments/Feedback (Required):	Points Earned: ____/10 (points to be assigned by the LSEF Team)		

SECTION #3 ENGINEERING DESIGN: <i>What design problem are you trying to address and how did you decide to go about addressing it?</i>	Superior (Exceeds)	Excellent (Meets)	Good
Project addresses a clear, focused engineering design problem or need; criteria for success are identified; preliminary designs prepared; prototype created and tested, results communicated.			
Student identified and applies established engineering principles in their design.			
Student used materials and processes effectively to correctly build prototype or model.			
Sufficient testing of prototype or model completed: data properly measured, presented, analyzed.			
Prototype successfully meets criteria that were established for the project.			
Comments/Feedback (Required)	Points Earned: ____/10 (assigned by the LSEF Team)		

SECTION #4 DEPTH OF UNDERSTANDING: <i>What did you learn about the engineering and previous designs for your project before and during the process.</i>	Superior (Exceeds)	Excellent (Meets)	Good
Adequate age appropriate background research and/or basic engineering research relevant to the project which provides basis for project.			
Supplements answers with relevant information reflecting knowledge gained during the project.			
Age appropriate use of terms and principles			
Adequate depth of knowledge and skills in technology systems involved.			
Comments/Feedback (Required):	Points Earned: ____/10 (assigned by the LSEF Team)		

SECTION #5 TEAMWORK: <i>How did your group function as a team? How was a team effort used to complete this project?</i>	Superior (Exceeds)	Excellent (Meets)	Good
All members of the team show an understanding and active participation in the entire project.			
All members of the team participate equally in the presentation of the project; correctly and clearly answering questions.			
The necessity of the individual expertise contributed by each team member is clear.			
Comments/Feedback (Required):	Points Earned: ____/10 (assigned by the LSEF Team)		

Total Points Earned (Completed by Science Fair Organizers)	Overall Rank (Circle)
Section 1: ____/10 Section 4: ____/10 Section 2: ____/10 Section 5: ____/10 Section 3: ____/10 TOTAL: _____/ 50	Superior (45-50) Excellent (30-44) Good (15-30) Satisfactory (0-14)

JUDGE Printed Name _____ Signature _____