

Year: 20 \_\_\_\_\_

*The OHIO ACADEMY of SCIENCE*  
**Science Day Judging Card – ENGINEERING DESIGN**

**INDIVIDUAL**

Event: \_\_\_\_\_

Copyright © The Ohio Academy of Science 2019. All rights reserved. No edits or other modifications may be made in the judging criteria without the express written permission of The Ohio Academy of Science. Distribution and reproduction for educational purposes is permitted provided this notice is not removed. [The following space may be used for student’s name, space assignment, project title or other administrative information.]

<b>JUDGES:</b> Please indicate your evaluation of each subsection by placing a checkmark in the appropriate box. (max. 10 points each section)			
<b>SECTION #1: ORAL, WRITTEN, AND VISUAL COMMUNICATION:</b> <b>Tell me about your project? May I see your report?</b> <i>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
<u>Written:</u> Well documented design engineering notebook (sketches, photos, iterations, testing data, results and references) with clear statement of technical problem and criteria for success AND Written Report (includes unambiguous title, organization, results, conclusions, reflections, correct grammar and spelling). <b>Both documents are present.</b>			
<u>Oral:</u> Correct and concise explanation of project, design and analysis reflecting clear understanding of the design process. Responses are clear, complete and correct.			
<u>Visual:</u> Logical organization of material, neatly displayed, graphics and legends appropriate to project, easy to read and understand. Photos and graphics cited. Includes required information.			
<b>Comments /Feedback(Required):</b>	<b>Points Earned: _____ /10</b>		
SUPERIOR 9-10 EXCELLENT 6-7-8 GOOD 4-5 SATISFACTORY 0-3			
<b>SECTION #2: ORIGINALITY: Where did you get the idea for your project and prototype? Did you modify any designs that you found and if so, how?</b>	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.			
<b>Comments /Feedback(Required):</b>	<b>Points Earned: _____ /10</b>		
SUPERIOR 9-10 EXCELLENT 6-7-8 GOOD 4-5 SATISFACTORY 0-3			

<b>SECTION #3: ENGINEERING DESIGN: <i>What design problem are you trying to address and how did you decide to go about addressing it?</i></b>	Superior (Exceeds)	Excellent (Meets)	Good
Project addresses a clear, focused engineering design problem or need; criteria for success are identified; preliminary designs prepared; prototype is created and tested with results clearly communicated.			
Student identifies 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 is completed; data is properly measured, presented and analyzed.			
Prototype successfully meets criteria that were established for the project.			
<b>Comments/Feedback (Required):</b>	<b>Points Earned: _____ /10</b>		
SUPERIOR 9-10 EXCELLENT 6-7-8 GOOD 4-5 SATISFACTORY 0-3			
<b>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></b>	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			
<b>Comments/Feedback (Required):</b>	<b>Points Earned: _____ /10</b>		
SUPERIOR 9-10 EXCELLENT 6-7-8 GOOD 4-5 SATISFACTORY 0-3			

<b>Total Points Earned (completed by judges)</b>	<b>Overall Rank (CIRCLE)</b>
Section 1: _____ / 10	Superior (36 - 40) Excellent (24-35) Good (12-23) *Satisfactory (0-11)  <i>*Satisfactory rank is not used at State Science Day. Use is optional at Local and District Science Days at the discretion of event administrators.</i>
Section 2: _____ / 10	
Section 3: _____ / 10	
Section 4: _____ / 10	
<b>Total: _____ / 40</b>	

JUDGE'S Printed Name \_\_\_\_\_ Signature \_\_\_\_\_