

Scoring Rubric for
Judging Group

Hardware & Robotics – Individual/Group – Level I / II / III / IV / V

Student(s)

Title

Software Used

Sponsor(s)

Judges

Area	1-3 or	4-7 or	8-10 or	11-15 or	Area Score
<p>Originality – 15 pts. Is the entry original, creative and imaginative in subject and/or implementation for age/grade?</p>	Project (idea and implementation) is simple and basic. Project shows no evidence of thought.	Limited evidence of thought. 90% copied work. Little writing in own words.	Project is extremely effective or imaginative.	Significant evidence of originality and inventiveness. The majority of ideas, or way in which information is displayed are in a fresh way. Evidence of research.	_____
<p>Final Product- 15 pts. Is there an obvious relationship to the computer? If robotic, is the device controlled through student created programming? If non-robotic in nature, are the components and/or other hardware appropriate to project?</p>	Robotic project lacks relationship to computer. Project does not function properly. Internal documentation is unclear. If it's a hardware project, all the configurations lack the appropriate components or do not function as intended or built.	Robotic project shows little relationship to a computer. Hardware project stops before logical conclusion or end. Inappropriate use of equipment based on project's implied function.	Project functions as designed, but demonstrates a simplistic use of components based on projects purpose.	The project shows obvious relationship to the computer. Programming reflects some sophistication with attention to feasibility and/or appropriateness of branching, loops and subroutines or conditional structure. Internal documentation is clear and concise, including remarks or comment statements and clearly explained variables.	_____
<p>Presentation Clarity 15 points Does (do) the student(s) articulate knowledge of software and subject matter? (Nervousness should not count against the student.)</p>	Student(s) does (do) not exhibit an understanding of software or project material.	Student(s) does (do) not exhibit an understanding of robotics or hardware capabilities. Student tries sharing the information, but obviously does understand the capabilities of the project.	Student(s) demonstrate(s) an understanding of the project capabilities. Can demonstrate and or explain the hardware or robotic device	Student(s) demonstrate(s) a strong understanding of the project capabilities. Can demonstrate and or explain the hardware or robotic device. Outstanding presentation.	_____

Area	1-3 or	4-7 or	8-10 or	11-15	Area Score
Value and Complexity 15 points Does the project reflect/show a direct instructional, commercial or other significant purpose? What is the complexity of the project?	Project complexity is simple, while there is little instructional, commercial or significant purpose evident.	Project complexity is average, while the project shows an average use of instructional, commercial materials or other significant purpose.	Project complexity is above average, while the project shows a strong use of instructional, commercial materials or other significant purpose.	Project complexity is excellent, while the project shows an outstanding use of instructional, commercial materials or other significant purpose.	
Quality of Workmanship 10 points How would you rate the quality of design and/or workmanship?	Average	Above Average	Excellent		
Project Function 10 pts. Does the project function as intended?	Not working or some problems.	Works with minor glitches.	Works as intended		
Documentation 10 pts.	Lacks documentation.	Documentation present, but incomplete or obviously done by someone else. Or documentation has numerous errors.	Title page, introductory page, instructions page and specifications (storyboard of planning) present with little or no errors.		
Impression 10 pts. As a judge, how does the project and the presentation impress you?	Poor	Good	Excellent		

Total Points _____