

NATIONAL INVENTION CONVENTION RUBRIC

Category	Dimension	Description	Points
Invention Process (45)	Identifying & Understanding	The Identifying stage is where an inventor seeks problems they want to solve. The stage involves how inventors uncover problems and who else might experience the same problem and to what end.	15
		Understanding a problem refers to the research that an inventor has done to understand what else exists to solve said problem as well as the full impact their problem may have on others.	
	Ideating	The step ideating refers to the brainstorming or imagination stage that a student goes through to generate original ideas and begin to develop their idea/s into specific requirements to determine the likelihood of success.	10
	Designing & Building	Designing an invention or a prototype requires critical thinking skills; students should be able to articulate how they wanted the invention to work and why they chose the materials they did for executing their invention.	10
	Testing & Refining	The key to this step is iterations, improvements & perseverance. The best inventors know that the first build is often not the best and seek feedback through testing and refine their design accordingly.	10
Invention Impact (25)	Market Potential	Market potential assesses the scope and likelihood of an invention gaining users. 1. How large and/or viable is the potential market? 2. To what extent was the market appropriately researched and scoped?	5
	Value Proposition	Does the inventor clearly summarize why a consumer or user should buy or use their invention? This statement convinces a potential (or future) consumer that one particular product or service will add more value or better solve a problem than other similar offerings	5

	Social Value	Some inventions may address pressing social issues. The 'social impacts' may not be easily quantifiable in a traditional economic sense but are nevertheless important to consider in the context of overall invention impact. 1. Does the inventor consider and address the potential environmental, societal, and other non-traditional impacts of their invention? 2. To what extent does the invention improve environmental/social conditions or have a minimal adverse impact?	5
	Originality	Is the student's invention unique, novel, and creative? Is it distinguishable from prior inventions and those of his/her peers?	10
Inventor Communication (30)	Logbook	 Does the logbook document a journey, not just a report done after-the-fact? Does the logbook document all aspects of the Invention Process: Problem Identification, Brainstorming (Ideation), Research, Solution, Test and Redesign. 	10
	Display Board	 Does the display have strong visual appeal? Is the display eye-catching with color, pictures, graphs, and variety? Is grammar, spelling, and punctuation correct and if hand-printed, neatly done? Does the display communicate significant aspects of the Invention Process: Problem, Research (why important/statistics of the problem), Solution, Impact? Are there unique aspects to the display, such as shape (display is not a basic cardboard Tri-fold)? 	5
	Prototype or Model	Does the prototype clearly communicate the key characteristics that make the invention valuable, usable, and unique? Note: Outside assistance and collaboration is acceptable as long as the student is driving the process and documents outside help. The student should only do what they can safely do. Credit should be given where help is given.	5
	The Live Pitch and Video	The Live Pitch and Q&A takes place during the NICEE event and is very similar to the online pitch but with the addition of a judge question and answer (Q&A) portion.	10

	The video pitch is a single recording that clearly and succinctly communicates the invention process and impact. It will be recorded and uploaded well in	
	advance of the NICEE event.	
TOTAL		100