



Category	Dimension	Description	Points
Invention Process (40)	Identifying & Understanding	<p>The Identifying stage occurs when inventors seek problems they want to solve. This stage involves how inventors uncover problems and discover who else might experience the same problem.</p> <p>Understanding a problem requires research to identify existing solutions that solve the identified problem and the shortcomings of those solutions. Understanding also includes researching the impact the problem may have on others.</p>	10
	Ideating	<p>Ideating refers to the brainstorming or imagination stage inventors go through to generate a variety of original ideas. Ideation includes developing specific criteria for a successful solution.</p> <p><i>Note: An inventor's idea/s may be updated at any time throughout the invention process.</i></p>	10
	Designing & Building	<p>Designing an invention or a prototype requires critical-thinking skills; inventors are expected to articulate how they intend the invention to work and why they chose the materials they did for executing their invention.</p>	10
	Testing & Refining	<p>The keys to this step are iterations, improvements and perseverance. The best inventors know the first build is often not the best and seek feedback through testing and refining their design accordingly.</p>	10
Invention Impact (25)	Market Research	<p>Market Research assesses the likelihood of an invention gaining users.</p> <ol style="list-style-type: none"> 1. How would you characterize the potential market? Who are the potential users? 2. How likely is the identified market to adopt the solution? 3. To what extent was the market appropriately researched? Inventors are encouraged to use both quantitative research (e.g., statistics) and qualitative research (e.g., interviewing experts or potential users). 	5
	Environmental & Societal Impact	<p>Inventors are asked to consider and communicate the potential environmental and/or societal impacts of their invention, both positive and negative (pros and cons). To what extent does the invention improve environmental/societal conditions or have a minimal adverse impact?</p>	5

Category	Dimension	Description	Points
Invention Impact (Continued)	Originality	Does the inventor demonstrate that their invention is better or different from existing solutions? Do they show how it is distinguishable from prior inventions? It is important to conduct and communicate research from a variety of sources to establish and verify originality.	15
Inventor Communication (35)	Logbook	<ol style="list-style-type: none"> Does the Logbook document a journey, not just a report done after the fact? Does the Logbook thoroughly document/explain all aspects of the Invention Process (Problem Identification, Understanding, Ideating, Designing, Building, Testing and Communicating) in a detailed manner? 	10
	Display Board	<ol style="list-style-type: none"> Does the Display Board support the inventor's presentation by communicating significant aspects of the Invention Process? Does the display have strong visual appeal, such as eye-catching colors, pictures, graphs and variety? Are grammar, spelling and punctuation correct and, if hand-printed, neatly done? 	5
	Prototype or Model	<p>Does the Prototype support the inventor's presentation and clearly communicate the key characteristics that address the identified problem?</p> <p><i>Note: Outside assistance and collaboration is acceptable as long as the student is driving the process and documents outside help. Inventors should only do what they can do safely. Credit should be given where assistance was received.</i></p>	5
	Video Presentation	The Video Presentation should be informative, energetic and speak to the originality of the invention. Inventors should include information on the first two categories of the rubric (Invention Process and Invention Impact). Inventors should prioritize communicating the Invention Process and challenges encountered while completing that process and explain completed research relating to the originality of the invention. Maximum limit of six minutes; minimum limit varies by grade.	5
	Live Presentation with Q&A	The Live Presentation with Q&A takes place during the event and is very similar to the online presentation video but with the addition of a judge and peer question-and-answer portion. Presentations should provide enough information so that a judge can score all aspects of the above rubric (except for the Video Presentation, as that is scored separately). Presentations should not exceed five minutes for Live Presentation, with time for Q&A afterward.	10
TOTAL			100