

INVENT THE FUTURE CHALLENGE 2018-2019

MARKERS OF SUCCESS

IDEA:

The Idea category celebrates thoughtful problem choice and originality in developing an impactful solution to that problem. The project explores new ideas and approaches to protecting the planet, applies these ideas in innovative ways, and demonstrates the impact of the solution.

IDEA	Beginning	Developing	Satisfactory	Exemplary
PROBLEM CHOICE & ORIGINALITY				
The team clearly identified a real-world, current or future environmental problem.				
The team researched the selected problem and the need for a solution was established. Need could be the problem not currently having a solution, the current solution can be improved or modified, or the problem can be solved in a new way.				
The team researched existing solutions to their chosen problem to inform their creative process.				
The focus of the team's problem is narrow enough to develop a feasible solution.				
The team developed an original solution: a modification or improvement of an existing solution, or an entirely new idea.				
IMPACT & REACH				
The team has demonstrated the potential environmental impact of their proposed solution.				
The team has researched and demonstrated the feasibility of their proposed solution, addressing any possible issues such as cost, technology, etc.				
The team demonstrates how the potential impact of their solution could be measured and scaled.				

PROCESS:

The Process category celebrates engaging in a robust, iterative, and collaborative design process. The project shows evidence of the team going through a multiple stages of a design cycle, complete with seeking and incorporating feedback, learning new skills, and working together with teammates.

PROCESS	Beginning	Developing	Satisfactory	Exemplary
ITERATIVE DESIGN				
The team demonstrates each stage of their iterative design process: Design, Prototype, Evaluate				
The team shows evidence of having gone through cycles of testing and improvement of their proposed solution (sketches, notes, photos, early prototypes, etc.)				
The team got feedback from other individuals (teachers, mentors, industry experts, etc.) on their proposed solution at some point during their process.				
The team identified and took steps to acquire new skills needed to complete their project.				
The team presents ideas on how they would continue working on their proposed solutions.				
COLLABORATION				
The team shows evidence of each team member's contributions throughout the entire process.				
The team considered members' strengths, knowledge, and skill sets in assigning tasks				
The team shows evidence of having used an effective, collaborative process to make decisions together.				
The team demonstrates positive attitudes and a sense of camaraderie.				

PRESENTATION:

The Presentation category celebrates compelling and thoughtful communication of ideas, both in sharing with audiences and the built prototype. The team's presentation of ideas is clear and engaging, and the prototype illustrates their solution to the Challenge Question.

PRESENTATION	Beginning	Developing	Satisfactory	Exemplary
COMMUNICATION				
The team used an effective method for communicating their ideas and process at the Challenge Summit (i.e. poster, slides, pamphlet)				
All team members participated in presenting their ideas and process.				
The team presented their ideas in an engaging and interesting manner.				
The team was able to answer questions regarding all aspects of their project.				
PROTOTYPE				
The team created a physical prototype or digital model which serves as a complete model, partial model, or proof of concept of their proposed solution.				
The team's prototype is a compelling representation of their work and demonstrates their solution effectively.				
The team was able to explain their prototype, how they built it, and how it represents their solution.				