



LAEF STEAM Fair Judging Rubric - Engineering Project

Project Title:

Student Name(s):

Project Component	Meets Requirement (1 point)
Abstract - A clear summary of the main points of your project.	
Identify the Need for your Prototype	
<ul style="list-style-type: none"> Statement includes the product being designed 	
<ul style="list-style-type: none"> Identifies who (the user) the product is designed for 	
<ul style="list-style-type: none"> Describes the problem or need the product will solve/meet 	
<ul style="list-style-type: none"> Explains how it improves previous designs 	
Design Criteria and Constraints	
<ul style="list-style-type: none"> Criteria: Identifies the requirements needed to make decisions about how to build and evaluate the product are identified 	
<ul style="list-style-type: none"> Criteria are stated using measurable quantities (correct units) 	
<ul style="list-style-type: none"> Constraints: Factors that limit the overall design are clearly listed 	
<ul style="list-style-type: none"> Project met all time constraints and design is economical 	
Evaluate Alternative Designs	
<ul style="list-style-type: none"> Project includes research of one possible previous solution and how the new prototype will make improvements. 	
<ul style="list-style-type: none"> Project includes research of a second possible previous solution and how the new prototype will make improvements. 	
<ul style="list-style-type: none"> Project includes research of a third possible previous solution and how the new prototype will make improvements. 	
Your Prototype	
<ul style="list-style-type: none"> Includes a photo or video of prototype 	
<ul style="list-style-type: none"> Written description of the prototype is provided 	
<ul style="list-style-type: none"> Presents lessons learned (frustrations) from the project 	
<ul style="list-style-type: none"> Image of labeled prototype included (arrows and text) 	
Testing the Prototype	
<ul style="list-style-type: none"> Describes the design was tested to meet criteria and constraints 	
<ul style="list-style-type: none"> Test results are clearly displayed (data tables, graphs, etc) 	
<ul style="list-style-type: none"> Test analysis discusses deficiencies of design 	
<ul style="list-style-type: none"> Test analysis describes corrections made to fix any deficiencies 	
Conclusions	
<ul style="list-style-type: none"> Includes a reflection of the original design solution and how the data analysis affected the design 	
<ul style="list-style-type: none"> Includes new questions developed as a result of the testing results 	
<ul style="list-style-type: none"> Considers ways to change the prototype's design to explore the new questions/concerns identified. 	
Bibliography and Resources - All resources are listed using proper MLA format.	
Flipgrid Video Submission -	
<ul style="list-style-type: none"> Video explains why the prototype was created (problem/need design solves/meets) 	
<ul style="list-style-type: none"> Video describes what was learned from the project 	
<ul style="list-style-type: none"> Video explains why the project is important 	
<ul style="list-style-type: none"> Video includes student(s) presenting a strong argument as to why they should be chosen as a finalist for the competition 	
TOTAL PROJECT SCORE = ____/28 Points	