Challenge Rubric

Engineering Design Process	Exemplary = 3	Proficient = 2	Novice = 1	Not Included = 0
Step 1: We can identify the challenge and the criteria.	Challenge restated and all criteria and constraints described.	Challenge restated with only the challenge criteria.	Challenge story only was stated.	Did not include a description of the challenge or the criteria.
Step 2: We can discuss the results of our research and the connections with a NASA subject matter expert (SME).	Three or more facts relating to the challenge were discussed.	Two facts relating to challenge were discussed.	One fact relating to challenge was discussed.	No facts related to the challenge was discussed.
Step 3: Each of our team members constructed an original design that demonstrated the challenge criteria.	All criteria and constraints were represented (sketches and photos) in each team member's design.	Two criteria were represented (sketches and photos) in each team member's design.	One criteria was represented (sketches and photos) in each team member's design.	No criteria was represented.
Step 4: Our final team design represented elements from each team members original design	The team design includes the best from each member's design to represent the challenge and the criteria.	The team design includes ideas from two team members' design to represent the challenge and the criteria.	The team design includes ideas from one team member's design to represent the challenge and the criteria.	The team was not able to provide a design to meet the challenge and the criteria.
Step 5: Our team constructed the model to represent the challenge criteria and constraints.	A model was completed that met all the criteria and the constraints of the challenge.	A model was completed that met only two of the criteria and constraints of the challenge.	A model was completed that met only one of the criteria and constraints of the challenge.	A model was completed that did not meet the criteria or the constraints of the challenge.
Step 6: Our team collected and recorded data to test and evaluate solutions of our model.	Data was collected by testing to represent all the criteria and constraints.	Data was collected by testing to represent only two criteria.	Data was collected by testing to represent only one criteria.	No data was collected or testing completed.
Step 7: Our team is able to explain a difficult issue of our design and how we solved it.	Difficult issues were explained and their solutions described.	Difficult issues were explained with no solutions offered.	Difficult issue was unclear and no solution presented.	Did not have a difficult issue discussion included.
Step 8: Our team made improvements after testing the model.	All improvements to the model were described.	Two improvements were described.	One improvement to the model was described.	No improvements to the model was described.
Our team followed the video production process.	All the video requirements and procedures were met.	Not all of the video requirements and procedures were met.	One of the video requirements and procedures were met.	The video requirements and procedures were not met.

Team Name:_____ **Final Team Score:** _____