

DESIGN CHALLENGE EVALUATION RUBRIC

Team Name: _____

Members: _____

Category	Score
<p><i>Brainstorm to Identify the Problem and Constraints</i></p> <ul style="list-style-type: none"> • The problem is identified and explained in detail. • All criteria and constraints are listed and clarified. • Possible solutions are listed from the brainstorming session. • The work others have done to solve the problem is included. 	
<p><i>Generate Ideas, Possibilities, and Design Choice</i></p> <ul style="list-style-type: none"> • Two or three ideas are selected from brainstormed list. • Detailed sketches are created for the selected ideas. • Sketches are labeled with dimensions and materials for each component. • One design is selected to construct with reasons for the choice. 	
<p><i>Build the Model or Prototype</i></p> <ul style="list-style-type: none"> • Detailed list of materials is included. • Detailed procedures are included and followed. Materials are handled and stored appropriately. • Safety rules are followed. 	
<p><i>Test the Model and Evaluate</i></p> <ul style="list-style-type: none"> • Hypothesis following an “if.., then...” format is developed for the design. • Strengths of the design are listed. • Weaknesses of the design or compromises of the design are listed. • Results are accurately recorded. • Data tables are complete and well organized. <p>The chosen design effectively addresses the identified problem.</p>	
<p><i>Refine the Design</i></p> <ul style="list-style-type: none"> • Modifications to improve the design are based on test results. • Modifications to the design are documented. • Additional trials are conducted. • Reflections show great insight and understanding of process and goals. 	
<p><i>Share the Design</i></p> <ul style="list-style-type: none"> • Presentation is well-organized. • Presentation covers all areas of the design process. • Presentation is clearly communicated (verbally or visually) with appropriate data, sketches, graphs or pictures. • Presentation includes contributions from all team members. 	
TOTAL (out of 24 pts possible)	

4 (Excellent) = All criteria (procedures, steps, and details) are met or followed with rare mistakes.

3 (Good) = Most criteria are met with only a few mistakes.

2 (Fair) = many criteria are not met and/or there are many mistakes.

1 (Poor) = Most criteria are not met.

0 (No effort) = No effort to meet criteria.