

CAD-A-Pult Project Rubric

NAME(S):

PERIOD:

CATEGORY	Does Not Meet Expectations (0-30% of points)	Attempted to Meet Expectations (31-60% of points)	Meets Expectations (61-80% of points)	Surpasses Expectations (81-100% of points)	# of Points
Research, Brainstorming, and Developing Ideas	Little research and brainstorming accomplished. Ideas generated are not original.	Research is evident as an outcome of brainstorming. Ideas generated are a result of the brainstorming process and not original.	New and original ideas are generated as a result of brainstorming and research. Little suggestions are offered for the design process.	Many new ideas are generated through research. Suggestions and details are given for design constraints of the product and manufacturing.	
Thumbnail Sketches	Few if any thumbnail sketches are provided. Provided thumbnails only show one idea in almost no detail.	Five or less thumbnails are provide showing minimum detail. Thumbnails only introduce one or two different designs.	Six to eight thumbnails are provided showing different ideas and different views of the detail in each idea. No detail view provided on back.	Nine or more thumbnails are provided showing different ideas and different views of the detail in each idea. Refined sketch is provided (on back) showing detail of favorite idea.	
Conceptual Design and Sketching	Only one or two sketches are offered for design review. Very small or very little detail.	A few small vague sketches are offered. Some overall dimensions and annotations are provided. Leaves design questions to be answered.	Many sketches are offered and showing much detail. Accurate multiview sketch is provided including design specs and annotation for developing the design.	Multiple accurate orthographic and isometric views are drawn to proportion and completely communicate the design. Specs and annotations are clearly noted. Constraints are also noted. Sketches completely show the idea.	
Developing the Design (CAD)	None or poor CAD drawings. Drawings missing views or detail. No dimensions.	Decent drawings but lacking some detail or dimensions. No border and titleblock present. Not plotted correctly.	Nice drawings showing full detail. Dimensions are present and accurate. Appropriate linetype conventions are used. Correct plot with border and titleblock.	Excellent drawings showing full detail and all views. Accurate dimensions and annotations. Linetypes all correct. Plotted correctly with attractive custom border and titleblock. Contest quality.	
Developing the Prototype	Poor or no prototype. Construction not complete. Unsafe.	Poor construction but testable. Some design specs ignored or different than final drawings.	Sturdy testable construction. Efficient use of construction methods and materials. Some details left in rough state.	Prototype is of contest quality. Completely clean construction using the best construction methods. Careful attention to every detail.	
Presentation and Reporting	Poor or no report given. Poor communication skills.	PowerPoint presentation lacking detail. Images were not of their own design. Presenters simply read from PowerPoint.	Nice PowerPoint presentation presented with good communication skills. Images depict the design process and document their design. Keeps the audience interested.	Truly outstanding PowerPoint presentation presented with excellent communication skills. Photos depict the design process and document their design. Completely documents their findings and sells their idea. Portfolio quality.	