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| **Product Design**  | **Pts**  | **Schmitt’s Pts** | **Self-Assessment** **score and notes** | **Description** |
| Define the Problem  | 10 |  |  | * Identify the target audience for product.
* Establish criteria and constraints.
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| Research the Problem | 50 |  |  | Find 10 designs of desk organizers that currently exist and include the following for each:* Cost
* Description
* Picture
* Likes and dislikes about the design
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| Develop Possible Solutions | 60 |  |  | Create at least 3 solutions and include the following for each:* Sketch of the design
* Description of the design
* Materials you would use for each part
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| Choose the Best Solution | 25 |  |  | Create a Pugh chart and rank each design on the criteria and constraints you created.  |
| Create a Prototype | 125 |  |  | * Draw a clean sketch of the design. (15 pts)
* Create a list of materials needed to build the prototype. (10 pts)
* Build your Prototype (100 pts)
	+ *Aesthetics / looks (25 pts)*
	+ *Solid construction (25 pts)*
	+ *Overall design functionality (50 pts)*
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| Test and Evaluate  | 20 |  |  | Answer the following questions (nothing is not a true reflection…there are always changes):* What works?
* What doesn’t work?
* What do you like or what would you change about the aesthetics?
* What do you like or what would you change about the materials?
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| Communicate  | 75 |  |  | * Create a presentation to document your project parts listed in the rubric. (25 pts)
* Create a 1-2 minute Shark Tank pitch for your product. Imagine it as a commercial advertisement or sales pitch. (75 pts)
* Correct time/length (15 pts)
* Production quality (30 pts)
* Demonstration of the product (15 pts)
* Why should I buy it? (15pts)
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| Redesign  | 20 |  |  | There are always redesigns in initial designs. A redesign doesn’t mean your design is not good, it just means we can make it better. * Sketch your new design.
* Make a bulleted list of your redesign modifications.
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| Presentation | 15 |  |  | Presentation and video. |
| **Total Points** | **400** |  |  |  |