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| --- | --- | --- | --- |
| **CRITERIA** | **UNSATISFACTORY****(Below Performance Standards)** | **PROFICIENT****(Minimal Criteria)** | **ADVANCED****(Demonstrates Exceptional Performance)** |
| **Collaboration****(10 points)** | **This portion is determined by your peer evaluation*.*** |
| **Creativity/ Innovation****(10 points)** | * **Does not show a distinct style, use ingenuity, or explain the innovation process, or does not show a personal touch when shaping ideas into a product appropriate for the purpose (i.e. uses something you found, not something you designed)**
* **Shows no evidence of reflection or revision**
* **Carton is not interesting or not functional.**
 | * **Demonstrates a distinct style, uses ingenuity, explains the innovation process, and shows a personal touch when shaping ideas into a product appropriate for the purpose (i.e. you designed it and are not using someone else’s design)**
* **Responds to failure by reflecting on the process**
* **Carton is interesting yet functional**
 | **In addition to meeting the PROFICIENT criteria …*** **Carton is of professional quality and needs no improvement. There are few to no improvements that could be made to the Carton or the Machine design**
* **Critical thought has been shown in the development of the carton and machine design (as is evident through answering questions during presentation)**
 |
| **0 - - -2 - - - 3 - - - 4 - - - 5** | **6 - - - - 7- - - - 8 - - - - 9** | **10** |
| **Critical Thinking****(10 points)** | * **Does not address the problem or does not find appropriate information to address it**
* **Student does not filter information based on its usefulness, accuracy, or credibility**
* **Does not distinguish between fact and opinion or acknowledge bias**
* **Does not use fact based evidence**
 | * **Identifies the information needed to address the challenge**
* **Thoroughly assesses the quality of information with respect to usefulness, accuracy, and credibility;**
* **Distinguishes fact vs. opinion and recognizes bias**
* **Supports claims and conclusions with fact-based evidence**
 | **In addition to meeting the PROFICIENT criteria …*** **Student is able to create new ideas based on changing circumstances, input or environment.**
* **The student can differentiate between correlation and cause and effect**
 |
| **0 - - -2 - - - 3 - - - 4 - - - 5** | **6 - - - - 7- - - - 8 - - - - 9** | **10** |
| **Communication**(10 points) | * **Does not ask and answer grade-level appropriate questions to demonstrate conceptual understanding and knowledge**
* **Does not present information, arguments, and supporting evidence clearly, concisely, and logically**
* **Communicates verbally, non-verbally, and in writing in a way that is inappropriate for the purpose, task, and audience**
 | * **Accurately and confidently asks and answers questions to demonstrate conceptual understanding and knowledge**
* **Presents information, arguments, and supporting evidence clearly, concisely, and logically**
* **Communicates verbally, non-verbally, and in writing in a way that is appropriate for the purpose, task, and audience**
 | **In addition to meeting the PROFICIENT criteria …*** **Communicates insightfully with consistent awareness of audience and purpose.**
* **Provides a variety of well-chosen details, quotations or examples to support claims.**
* **Student was enthusiastic about his/her message and actively sought to engage the audience in his/her belief**
* **Ideas expressed flow in a coherent sequence during the presentation**
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| **0 - - -2 - - - 3 - - - 4 - - - 5** | **6 - - - - 7- - - - 8 - - - - 9** | **10** |

**Content Rubric (60 Points)**

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| --- | --- | --- | --- | --- | --- |
| **Carton Design Project** **Document 1** | **Includes Surface area for all surfaces of the carton****(6 points)** | **Surface area for all surfaces of the carton is correct****(2 points)** | **Design (flat net) includes all needed dimensions (with units of measure) for the net and tabs** **(4 points)** | **Includes Volume for all 3D shapes involved in design****(6 points)** | **Volume is correct****(2 points)** |
| **Includes area for tabs****(6 points)** | **Area for tabs is correct****(2 points)** | **Includes total (sides and tabs) surface area****(6 points)** | **Total Surface area is correct****(2 points)** | **All work for finding the surface area and volume is organized and easy to follow.****(4 points)** |
| **Carton Prototype** | **Project included a complete prototype of the carton****(5 points)** | **Prototype has sharp corners, is completely folded, glued, and has high quality workmanship in its construction.****(5 points)** | **Prototype includes the design for all printing and information on the sides of the carton.****(5 points)** | **There are no grammar or spelling errors on the carton.****(5 point)** | **Carton takes into account how it will have milk put in and how people will get milk out.****(5 points)** |