**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Mme Kwiatkowski**

**APPLIED DESIGN:** 3D Printing Project

**Big Ideas:**

• Design can be responsive to identified needs.  
• Designs can be improved with prototyping and testing.  
• Skills are developed through practice, effort, and action.

**Task:**

Students will apply creativity and critical thinking to solve **DESIGN PROBLEMS** solicited from our community. Students will use the program tinkercad, our 3D printers and collaborate with the community to address real world problems.

| **Criteria** | **Emerging** | **Developing** | **Applying** |
| --- | --- | --- | --- |
| **Attitude, effort, and perseverance**  • The project was successfully completed and consistent effort was demonstrated.  • The student stayed on task at all times working independently or cooperatively. |  |  |  |
| **Applied Design Competencies** | | | |
| **Understanding context:**  • Student empathized with potential users to find issues and uncovered needs and potential design opportunities  • Student identified a real-world problem and suggested solutions related to the topic |  |  |  |
| **Design Opportunity and Ideating:**  • Student chose a design opportunity and pursued it. |  |  |  |
| **Prototyping:**  • Student constructed a first version of the product or a prototype, as appropriate, making changes as needed. |  |  |  |
| **Testing:**  • Student tested the first version of the product or the prototype.  • Student gathered peer and/or user and/or expert feedback and inspiration.  • Student made changes, troubleshoot, and tested. |  |  |  |
| **Making:**  • Student made a plan for production that includes key stages, and carried it out, making changes as needed.  • Student used materials in ways that minimize waste |  |  |  |
| **Sharing:**  **•**Studentdemonstrated their product and describe their process, using appropriate terminology and providing reasons for their selected solution and modifications.  • Student reflected on their design thinking and processes, and evaluated their ability to work effectively both as individuals and collaboratively in a group, including their ability to share and maintain an efficient co-operative work space |  |  |  |
| **Overall** | | | |
| **Overall**  The overall project is exemplary. The entire project is excellent. |  |  |  |

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| **French Writing** | | | |
| **Conventions and sentence structure**  All sentences are complete and information is stated in the students’ own words. There are very few spelling or grammar mistakes. The writer used correct capital letters and punctuation. |  |  |  |
| **French Presentation skills** | | | |
| **Fluency and volume**  The student speaks very clearly without hesitation. Volume is excellent. Pronunciation and expression sound natural. We can clearly see that the student practiced several times before the presentation. |  |  |  |