

(Educator Version) Desk Organizer Design Rubric

Criteria	Target Performance	Exceeds Expectations <i>(Sample Comments)</i>	Needs Improvement <i>(Sample Comments)</i>	Curriculum Alignment (Grade 7)	Curriculum Alignment (Grade 8)
Research and Application of Ideas	The research report effectively summarizes findings from existing desk organizers and clearly explains how these findings influenced the design.	The research demonstrates deep analysis and innovative thinking, leading to a design that addresses specific gaps in the market.	The research is minimal or lacks connection to the final design, with limited evidence of how findings were applied.	Visual Arts: D2.3: Evaluate their own work and that of others based on criteria developed through the creative process.	Visual Arts: D2.3: Evaluate their own work and that of others based on criteria developed through the creative process.
Accuracy and Detail in Orthographic and Perspective/Isometric Drawings	The orthographic and perspective/isometric drawings are accurate, detailed, and clearly reflect the intended 3D model. They effectively serve as a blueprint for the Tinkercad design.	The drawings are exceptionally detailed and precise, demonstrating advanced planning and foresight. The level of accuracy greatly enhances the quality of the 3D model.	The drawings lack accuracy or detail, making it difficult to translate them into a precise 3D model. There are noticeable discrepancies between the sketches and the final design.	Math: E1.4: Create and analyze designs involving geometric shapes, transformations, and measurements. Visual Arts: D1.3: Use a variety of materials, tools, and technologies to create 3D artworks that communicate ideas, messages, and themes.	Math: E1.2: Create and evaluate 3D objects, understanding geometric properties. Visual Arts: D1.3: Use a variety of materials, tools, and technologies to create 3D artworks that communicate ideas, messages, and themes.

<p>Functionality and Stability of Design</p>	<p>The desk organizer is functional, stable, and meets the intended user's needs. The design includes compartments for various items and maintains stability when in use.</p>	<p>The design is highly functional, with innovative features that enhance stability and usability beyond basic expectations. It shows a deep understanding of user needs.</p>	<p>The design is either not fully functional or lacks stability. It may fail to effectively organize items or maintain balance when in use.</p>	<p>Science: D2.2: Describe how the center of gravity affects stability in structures. Science: D2.7: Describe methods engineers use to assess and improve the safety of structures.</p>	<p>Science: D2.2: Describe how the center of gravity affects stability in structures. Science: D2.7: Describe methods engineers use to assess and improve the safety of structures.</p>
<p>Use of CAD Tools in Tinkercad</p>	<p>Tinkercad tools are used effectively to create a well-organized, aesthetically pleasing 3D model that reflects the initial drawings.</p>	<p>The use of Tinkercad tools demonstrates advanced skills, including the creative use of custom features, modularity, and precise adjustments.</p>	<p>The use of Tinkercad tools is basic or lacks creativity. The final model may not fully reflect the initial drawings or misses opportunities for improvement through tool use.</p>	<p>Visual Arts: D1.1: Create two- and three-dimensional works of art that communicate ideas and concepts using a variety of tools, materials, and techniques. Math: E2.2: Use appropriate tools to construct 3D shapes from 2D representations and calculate their surface area and volume.</p>	<p>Visual Arts: D1.1: Create two- and three-dimensional works of art that communicate ideas and concepts using a variety of tools, materials, and techniques. Math: E2.2: Use appropriate tools to construct 3D shapes from 2D representations and calculate their surface area and volume.</p>

<p>Aesthetics and User Appeal</p>	<p>The design is visually appealing and considers the style preferences of the target user, with thoughtful attention to colour, shape, and overall design.</p>	<p>The design is exceptionally attractive, with a unique aesthetic that strongly appeals to the target user. It stands out due to its creativity and attention to detail.</p>	<p>The design lacks visual appeal or does not effectively consider the target user's style preferences. It may be plain or uninspired.</p>	<p>Visual Arts: D1.3: Use a variety of materials, tools, and technologies to create 3D artworks that communicate ideas, messages, and themes.</p>	<p>Visual Arts: D1.3: Use a variety of materials, tools, and technologies to create 3D artworks that communicate ideas, messages, and themes.</p>
<p>Reflection and Improvement</p>	<p>The reflection thoughtfully considers feedback and identifies specific improvements made to the design. The final product shows clear enhancements based on this reflection.</p>	<p>The reflection demonstrates deep critical thinking, with significant improvements made to the design. The designer shows a strong ability to learn and adapt.</p>	<p>The reflection is superficial or does not clearly connect feedback to improvements. Limited changes were made to the design, if any.</p>	<p>Visual Arts: D2.3: Evaluate their own work and that of others based on criteria developed through the creative process. Science: D2.2: Design, construct, and evaluate models of structures using a variety of materials, tools, and techniques.</p>	<p>Visual Arts: D2.3: Evaluate their own work and that of others based on criteria developed through the creative process. Science: D2.2: Design, construct, and evaluate models of structures using a variety of materials, tools, and techniques.</p>