

## Pinwheels Rubric

Objectives	Advanced 3 Points	Intermediate 2 Points	Novice 1 Point	Points
<b>Design Thinking Process</b>	Demonstrates an exceptional understanding of three-dimensional design principles by thoughtfully applying principles of aerodynamics, aesthetics, and scientific inquiry across their work	Demonstrates a basic understanding of three-dimensional design principles by applying some ideas of aerodynamics, aesthetics, or scientific inquiry, though application may be limited or inconsistent	Shows a limited understanding of three-dimensional design principles, with minimal or incomplete use of aerodynamics, aesthetics, or scientific inquiry	
<b>Using Computer Aided Design Software (CAD)</b>	Consistently follows instructions, effectively utilizes taught tools, and anticipates subsequent steps. Develops designs with thoughtful detail that reflect personal interests or aesthetic preferences.	Follows instructions, uses tools correctly, and shows some planning for next steps. Creates designs with clear effort and personal touches	Has trouble following instructions, uses tools incorrectly or inconsistently, and rarely plans next steps. Designs show little detail or personal effort	
<b>Applying Design Principles</b>	Successfully applies a variety of design principles such as shape and layout, balance, symmetry, etc. Is able to discuss the impacts of these principles on their design.	Applies some design principles. Is approaching the ability to discuss the impacts of these principles on their design.	Applies little to no design principles. Does not discuss the impacts of principles on their design.	
<b>Constructive Feedback</b>	Effectively gives, receives, and applies constructive feedback. Proactively seeks input from peers and instructors, and can engage in thoughtful discussions to explain design choices or justify why suggested changes may not be necessary	Gives, receives, and applies feedback with some effectiveness. Occasionally seeks input from peers and instructors, and can explain design choices or respond to suggested changes, though not always with depth or consistency.	Responds to feedback when prompted but may struggle to apply it effectively. Rarely seeks input independently and has difficulty explaining or justifying design choices when questioned.	
<b>Communication</b>	Compotently explains design choices in relation to the intended message and target audience, while also recognizing constraints on design and available materials	Explains why they made certain design choices and how those choices help share their message with their audience. Shows some awareness of limits, like time, materials, or tools available	Tries to explain design choices but shows little or no connection to the message or audience. Does not show awareness of limits like time, materials, or tools	
<b>Point Key:</b>	<b>11 - 15 Points</b>	<b>6 - 10 Points</b>	<b>1 - 5 Points</b>	Total: