

# Boat Challenge Assessment

<b>REVISIONS</b> <i>Areas that need work</i>	<b>CRITERIA</b> <i>Standards for this project</i>	<b>MASTERY- <i>Evidence of exemplary performance</i></b>
	<p><b>In this project, I...</b></p> <p><b>I LEARNED MATHEMATICAL CONCEPTS:</b></p> <ul style="list-style-type: none"> <li>● Perfect squares and cubes.</li> <li>● Square and cube roots.</li> <li>● Numerical proportional reasoning (ratio, proportions, and percent)</li> <li>● Surface area and volume of regular solids, including triangular and other right prisms and cylinders.</li> <li>● Pythagorean theorem</li> <li>● Construction , views and nets of 3D objects.</li> </ul>	
	<p><b>APPLIED MATH TO A DESIGN</b></p> <ul style="list-style-type: none"> <li>● Use tools or technology to explore and create patterns and relationships, and test conjectures.</li> <li>● Apply multiple strategies to solve problems in both abstract and contextualized situations.</li> <li>● Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving.</li> <li>● Explain and justify mathematical ideas and decisions.</li> <li>● Communicate mathematical thinking in many ways.</li> <li>● Represent mathematical ideas in concrete, pictorial, and symbolic forms.</li> <li>● Reflect on mathematical thinking.</li> <li>● Connect mathematical concepts to each other and to other areas and personal interests.</li> </ul>	
	<p><b>DESIGNED A CARDBOARD BOAT</b></p> <ul style="list-style-type: none"> <li>● demonstrated the use of the design processes</li> <li>● took creative risks in generating ideas, and enhancing my ideas.</li> <li>● included evidence of prototyping</li> <li>● helped bring one prototype to completion, visually demonstrating “beautiful work,” a professional finished project with potential for real-life function</li> <li>● integrated feedback from critiques to enhance the project as it developed.</li> </ul>	

	<ul style="list-style-type: none"><li>• helped communicate all of the processes that led to this step at an virtual exhibition of learning (a videotaped test in a body of water, shared on a community platform).</li></ul>	
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