

## Middle School Engineering Design

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NGSS Code	Performance Expectations	Bridge Builder Module					
		Structural Concepts	Beam Me Up	Bridge Analysis	Draft It Up!	Basic Box Bridge Structure	Improved Box Bridge Structure
MS-ETS1	Matter and Its Interactions						
MS-ETS1-1	Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.						
MS-ETS1-2	Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.						
MS-ETS1-3	Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.						
MS-ETS1-4	Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.						