Middle School

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 ETS 1-1	**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 ETS 1-1
Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem. MS ETS 1-2	**2** **Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.** MS ETS 1-2
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 ETS 1-3	**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 ETS 1-3
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. MS ETS 1-4	**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.** MS ETS 1-4