

## MAINE SCIENCE AND ENGINEERING STANDARDS

### 3-5-ETS1 Engineering Design

**3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.**

Asking Questions and Defining Problems, Defining and Delimiting Engineering Problems, Influence of Engineering, Technology, and Science on Society and the Natural World

**3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.**

Constructing Explanations and Designing Solutions, Developing Possible Solutions, Influence of Engineering, Technology, and Science on Society and the Natural World

**3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.**

Planning and Carrying out Explanations, Developing Possible Solutions, Optimizing the Design Solution