

Reviewer: _____

Date: _____

Title: _____

Unit Lesson Activity

Author: _____

Approved Rejected

Grade Level: _____

Engineering Category: Relating science and/or math concept(s) to engineering

Engineering analysis or partial design Full engineering design process

Section A: Engineering Motivation	Yes	Yes with Modification. Explain.	No. Explain.
Does this activity require students to relate STEM concept(s) to an authentic problem in everyday life in the procedure or assessment sections? Relate might include asking for examples of real-world applications or requiring students to solve a real-world problem using the concept.			
In the procedure and/or assessment sections, does the author clearly convey in the engineering connection ways in which students might relate STEM concept(s) to a real-world problem?			
Section B: Engineering Concepts	Yes	Yes with Modification. Explain.	No. Explain.
Does the activity include a systematic and detailed examination that incorporates math skills to define problems, predict performance, determine economic feasibility, evaluate alternatives, analyze mathematical models, and/or investigate failures?			
Does the activity require students to identify appropriate materials and tools for their designs based on specific properties and characteristics?			
Does the activity require students to determine the best possible solution to a technical problem while balancing competing or conflicting factors (specifications and constraints) and trade-offs?			
Does the activity require students to examine the more abstract impacts of engineering products or processes on individuals, society and the environment? This may also include environmental, ethical, economical, social, and political realities and impacts.			

Section C: Engineering Design Process	Yes	Yes with Modification. Explain.	No. Explain.
Does the activity require students to define the problem and describe the performance standards by which a design is evaluated? This may include quantitative and qualitative requirements such as size, weight, time, cost, life cycle, function, safety, color, etc.			
Does the activity require students to gather and research information to solve the problem? This may include internet/library research, conducting experiments, examining scientific or math concepts to understand how to apply them, etc.			
Does the activity require students to evaluate each proposed solution to determine which solution best meets the needs and satisfies the criteria?			
Does the activity require students to build and test prototypes of all or part of the design? This may include a graphical, physical or mathematical representation of the essential features of the design.			
Does the activity enable students to revise and improve their designs based on the results of testing and analysis?			
Does the activity require students to report (oral or written) the process and results of their engineering design activities?			