Unit: Multimedia Layout and Design	Concept: Minimalizing Negative Impacts
Standard • 3.5.9-12.C Develop a solution to a technological problem that has the least negative environmental and social impact.	
Key Learning • (LTTG) Students will be able to apply investigation, imagination, innovative thinking, and physical skills to accomplish goals.	**Unit Essential Question** • How can I apply investigation, imagination, innovative thinking, and physical skills to accomplish goals?
Essential Question • Why is it important to sustainably manage technological resources?	
Key Vocabulary • Development, Solution, Technical Problem, Impact, Sustainability, Identification, Analysis, Investigation, and Design	
Learning Experience • Students who demonstrate understanding can develop a solution to a technological problem that has the least negative environmental and social impact. • Clarifying Statement: Students can be challenged to engage in problem identification, analysis, investigation, and design to find technological solutions that improve people's living conditions or that improve the well-being of individuals or members of a group.	
(Big Idea) Technology & Engineering Curriculum Framework Big Ideas • Responsible creation and use of technology requires the sustainable use of renewable and non-renewable resources and handling of waste.	
(SEP) Science and Engineering Practices • Asking Questions and Defining Problems - Define a design problem that can be solved through the development of an object, tool, process or system and includes multiple criteria and constraints, including scientific knowledge that may limit possible solutions.	
(DCI) Disciplinary Core Ideas • ETS1.B: Developing Possible Solutions - When evaluating solutions, it is important to take into account a range of constraints, including cost, safety, reliability, and aesthetics, and to consider social, cultural, and environmental impacts.	
(TEP) Technology and Engineering Practices	

- Attention to Ethics - Assesses technological products, systems, and processes through critical analysis of their impacts and outcomes.

Terms

- (ETS) Engineering, Technology, and Applications of Science – Standards applicable across the Science, Environmental Literacy & Sustainability, and Technology & Engineering content areas.
- (LTTG) PDE Technology & Engineering Long Term Transfer Goals
- (Learning Experience) A learning experience refers to any interaction, activity, or other experience in which students acquire new understanding, knowledge, behaviors, or skills.
- (Big Idea #) PDE Technology & Engineering Curriculum Framework Big Ideas
- (SEP) PDE Science and Engineering Practices
- (DCI) PDE Disciplinary Core Ideas
- (TEP) PDE Technology and Engineering Practices