Standard

• 3.5.9-12.Z Recognize and explain how their community and the world around them informs technological development and engineering design.

Key L	earning
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 (LTTG) Students will be able to engage as technological and engineering literate members of a global society.

Unit Essential Question

 How can I engage as a technological and engineering literate member of a global society?

Essential Question

• Why is design important to human activity?

Key Vocabulary

• Community, Development, and Design

Learning Experience

- Students who demonstrate understanding can recognize and explain how their community and the world around them informs technological development and engineering design.
- Clarifying Statement: Technological developments are best achieved through experiences and interactions within a given context. For example, design of buildings should take into account local conditions including soil type, wind, and snow loads, and should also match local building codes and building styles.

(Big Idea) Technology & Engineering Curriculum Framework Big Ideas

• Design is a fundamental human activity.

(SEP) Science and Engineering Practices

• Obtaining, Evaluating, and Communicating Information - Compare, integrate and evaluate sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a scientific question or solve a problem.

(DCI) Disciplinary Core Ideas

• ISTE 3D - Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.

(TEP) Technology and Engineering Practices

- Attention to Ethics Assesses technological products, systems, and processes through critical analysis of their impacts and outcomes.
- Systems Thinking Designs and troubleshoots technological systems in ways that consider the multiple components of the system.

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