Unit: Finalizing and Presenting Digital Graphics	**Concept: Technology Diffusion and Adoption**

Standard
- 3.5.9-12.NN Analyze the rate of technological and engineering development and predict future diffusion and adoption of new innovations and technologies.

Key Learning
- (LTTG) Students will be able to exchange and explain ideas by sharing information with a larger community.

Unit Essential Question
- How can I exchange and explain ideas by sharing information with a larger community?

Essential Question
- How does the interdisciplinary nature of technology and engineering influence human activity?

Key Vocabulary
- Invention, Innovation, Diffusion, and Interdisciplinary

Learning Experience
- Students who demonstrate understanding can analyze the rate of technological and engineering development and predict future diffusion and adoption of new innovations and technologies.
- Clarifying Statement: The rate of development of inventions and innovations is affected by many factors, such as time and monetary investment. Many new technologies build upon previous technologies, often resulting in quick development and dispersion. For example, the rapid development of consumer scale drone technologies has built upon earlier military applications of these devices.

(Big Idea) Technology & Engineering Curriculum Framework Big Ideas
- The study of technology and engineering as a human activity is interdisciplinary.

(SEP) Science and Engineering Practices
- Developing & Using Models - Develop, revise, and/or use a model based on evidence to illustrate and/or predict the relationships between systems or between components of a system.

(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
- Making and Doing - Demonstrates the ability to regulate and improve making and doing skills.
- Optimism - Shows persistence in addressing technological problems and finding solutions to those problems.

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