Unit: Digital Graphics Applications	Concept: Digital Graphics

Standard

- 3.5.9-12.N Analyze and use relevant and appropriate design thinking processes to solve technological and engineering problems.
- 3.5.9-12.P Apply a broad range of design skills to a design thinking process.
- 3.5.9-12.Y (ETS) Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.
- 3.5.9-12.X Implement the best possible solution to a design using an explicit process.

Key Learning

- (LTTG) Students will be able to employ hands-on problem solving, i.e., designing, making/building, producing, and evaluating outcomes.
- (LTTG) Students will be able to collaborate as part of a team, valuing the contributions of all members.

Unit Essential Question

- How can I employ hands-on problem solving, i.e., designing, making/building, producing, and evaluating outcomes?
- How can I collaborate as part of a team, valuing the contributions of all members?

Essential Question

- How can I design, develop, create, and evaluate effective digital graphics?

Key Vocabulary

- Thumbnail Sketches, Roughs, Comprehensive (Comp), Digital Graphic Design, PSD, JPEG, GIF, PNG, Vector Image, Raster Image, and Resolution

Learning Experience

- Students will design, develop, and create effective graphics that convey a message to an audience, is a visual representation of an idea, and relies on the creation, selection, and organization of visual elements.

Performance Task

- Students will be challenged with complex digital graphics problems to solve, designing, developing, creating, and evaluating effective digital graphic designs. Based on the criteria and constraints, students will determine the best possible solutions to meet the needs and wants of the end-user(s). Students will design, develop, create, and evaluate their design solutions.

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.
- (Performance Task) A performance task is any learning or assessment that asks students to perform to demonstrate their knowledge, understanding, and proficiency.