

Unit: Design and Creation of Promotional Graphics	Concept: Applying Design Principles
<p>Standards</p> <ul style="list-style-type: none"> • 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. 	
<p>Key Learning</p> <ul style="list-style-type: none"> • (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. 	<p>Unit Essential Question</p> <ul style="list-style-type: none"> • 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?
<p>Essential Question</p> <ul style="list-style-type: none"> • How can I apply design principles to create effective promotional graphic designs? 	
<p>Key Vocabulary</p> <ul style="list-style-type: none"> • Balance, Visual Hierarchy, Focal Point, Contrast, Unity, Repetition, Alignment, Proximity, Spatial Depth, Illusion, Grid, and Template 	
<p>Learning Experience</p> <ul style="list-style-type: none"> • Students will model, practice, and apply balance, visual hierarchy, focal point, contrast, unity, repetition, alignment, proximity, spatial depth, illusion, grid, and template to design, develop, and create effective designs. 	
<p>(Big Idea) Technology & Engineering Curriculum Framework Big Ideas</p> <ul style="list-style-type: none"> • There are universal principles and elements of design. 	
<p>(SEP) Science and Engineering Practices</p> <ul style="list-style-type: none"> • Constructing Explanations and Designing Solutions - Design, evaluate, and/or refine a solution to a complex real-world problem, based on scientific knowledge, student-generated sources of evidence, prioritized criteria, and trade-off considerations. 	
<p>(DCI) Disciplinary Core Ideas</p> <ul style="list-style-type: none"> • 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.
- Critical Thinking - Uses evidence to better understand and solve problems in technology and engineering, including applying computational thinking.

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