Unit 07: Visuals through vectors

Content Area: **Technology**
Course(s):
Time Period: **April**
Length: **3 Blocks**
Status: **Published**

Transfer Skills

Students will explore the creation and manipulation of vector graphics by using the Illustrator application.

Enduring Understandings

Describing and analyzing the mass media will raise awareness of its common myths and misconceptions.

There are many file formats with each having a specific purpose.

Designers use brainstorming techniques to help develop strong conceptual ideas.

Essential Questions

What are vector graphics?

Where do designers find inspiration?

How are concepts born?

Where do we find design?

Content

Vocabulary:

Paths, vectors, Smart Objects, convert, bitmap, pen tool, freeform pen tool, add anchor point tool, delete

anchor point tool, convert anchor point tool, anchor points, direction lines.

Skills

Demonstrate the program abilities of Illustrator by exploring differences between bitmap and vector graphics, straight and curved paths, drawing and editing layer shapes, drawing custom layer shapes, successfully importing and editing a Smart Object when completing class projects.

Demonstrate the program abilities of Illustrator by exploring a file, utilizing the desktop, working with tools, the application bar and control panel, managing document windows, saving a customized workspace, changing the magnification of a document, navigating through a document, and successfully utilizing context menus when completing class projects.

Resources

computers, internet access, Adobe InDesign and Illustrator, color printer, on-line tutorials

Standards

TECH.8.2.12.A.CS2 - [*Content Statement*] - The core concepts of technology.

TECH.8.2.12.C.2 - [*Cumulative Progress Indicator*] - Analyze a product and how it has changed or might change over time to meet human needs and wants.

TECH.8.2.12.C.CS3 - [*Content Statement*] - The role of troubleshooting, research and development, invention and innovation and experimentation in problem solving.

TECH.8.2.12.C.2 - [*Cumulative Progress Indicator*] - Analyze a product and how it has changed or might change over time to meet human needs and wants.

TECH.8.1.12.B.CS1 - [*Content Statement*] - Apply existing knowledge to generate new ideas, products, or processes.

TECH.8.1.12.A.CS2 - [*Content Statement*] - Select and use applications effectively and productively.

TECH.8.1.12.A - [*Strand*] - Students demonstrate a sound understanding of technology concepts, systems and operations.

TECH.8.1.12.D - [*Strand*] - Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

TECH.8.2.12.D.CS1 - [*Content Statement*] - Apply the design process.

TECH.8.2.12.E.4 - [*Cumulative Progress Indicator*] - Use appropriate terms in conversation (e.g., troubleshooting, peripherals, diagnostic software, GUI, abstraction, variables, data types and conditional statements).

TECH.8.2.12.E.1 - [*Cumulative Progress Indicator*] - Demonstrate an understanding of the problem-solving capacity of computers in our world.

TECH.8.1.12.A.3 - [*Cumulative Progress Indicator*] - Collaborate in online courses, learning communities, social networks or virtual worlds to discuss a resolution to a problem or issue.

TECH.8.1.12.A.2 - [*Cumulative Progress Indicator*] - Produce and edit a multi-page digital document for a commercial or professional audience and present it to peers and/or professionals in that related area for review.

TECH.8.1.12.F.CS2 - [*Content Statement*] - Plan and manage activities to develop a solution or complete a project.

TECH.8.1.12.F.CS4 - [*Content Statement*] - Use multiple processes and diverse perspectives to explore alternative solutions.

TECH.8.1.12.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.
TECH.8.1.12.A.2	Produce and edit a multi-page digital document for a commercial or professional audience and present it to peers and/or professionals in that related area for review.
TECH.8.1.12.A.3	Collaborate in online courses, learning communities, social networks or virtual worlds to discuss a resolution to a problem or issue.
TECH.8.1.12.A.CS2	Select and use applications effectively and productively.
TECH.8.1.12.B.CS1	Apply existing knowledge to generate new ideas, products, or processes.
TECH.8.1.12.D	Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
TECH.8.1.12.D.CS1	Advocate and practice safe, legal, and responsible use of information and technology.
TECH.8.1.12.F.CS2	Plan and manage activities to develop a solution or complete a project.
TECH.8.1.12.F.CS4	Use multiple processes and diverse perspectives to explore alternative solutions.
TECH.8.2.12.A.CS2	The core concepts of technology.
TECH.8.2.12.C.2	Analyze a product and how it has changed or might change over time to meet human needs and wants.
TECH.8.2.12.C.CS3	The role of troubleshooting, research and development, invention and innovation and experimentation in problem solving.
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