Unit 05: Creating by looking through the viewfinder

Content Area: **Technology**
Course(s):
Time Period: **December**
Length: **22 Blocks**
Status: **Published**

Transfer Skills

Students will become familiar with digital camera terminology, function, and types of photography.

Enduring Understandings

Photography has provided a means of societal documentation.

Photography is an integral component of our daily lives.

Graphic Designers use symbols and imagery to communicate ideas.

Many careers rely on the knowledge of photography.

Humans use images and symbols to describe and understand the world around them.

Essential Questions

How do designers connect with their clients?

Where do designers get their ideas from?

What has caused photography methods to change?

How can an artist use the principles of design to represent the world?

Content

Vocabulary:

camera obscura, sensor, aperture, shutter, lens, focus, single lens reflex, tripod, refraction, focal length, telephoto lens, wide angle (short) lens, focus, depth of field, ISO, focal point, rule of thirds, lead in lines, balance, abstract, cropping, framing, vertical, horizontal, flash hotspot, redeye, camera shake, digital, scale.

Skills

Explore digital photography and Photoshop through the history of photography, careers, and camera anatomy (nomenclature).

Construct knowledge of the types of lenses, focal length and depth of field, automatic and manual focus, ISO light and image sensor, exposure and modes of exposure, metering, and light through photography assignments, projects and activities.

Demonstrate light usage, composition, while completing class assignments.

Create Photoshop files.

Develop creative expression through the creation of custom digital photograph and edits in Photoshop.

Perform best practices when electronically saving work.

Resources

Cameras, computers, color printer, YouTube videos, internet access, online tutorials

Computers, Adobe InDesign, Adobe Photshop CC, Adobe Illustrator CC, Adobe DreamWeaver CC

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.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.
TECH.8.2.12.D.CS1	Apply the design process.
TECH.8.2.12.E.1	Demonstrate an understanding of the problem-solving capacity of computers in our world.
TECH.8.2.12.E.4	Use appropriate terms in conversation (e.g., troubleshooting, peripherals, diagnostic software, GUI, abstraction, variables, data types and conditional statements).