# Unit 03: Create, combine, repair

Content Area: **Technology**
Course(s):
Time Period: **October**
Length: **10 Blocks**
Status: **Published**

## Transfer Skills

Students will edit and repair digital photography using the Photoshop application. Students will independently apply tools and techniques in Photoshop to solve visual problems.

## Enduring Understandings

The principles of design are inspired by the arrangement of the elements of art.

Understanding the demographic you are designing for is crucial to the finished piece.

Available tools, techniques and resources influence graphic design.

Graphic design goes beyond the printed page.

## Essential Questions

How does describing and analyzing the mass media deepen one's understanding of our culture and consumerism?

How does your definition of digital media compare to others?

How do humans communicate?

## Content

**Vocabulary:**

Raw, .jpeg, .bmp, .psd, .tiff, PDF file formats, resolution, highlights, midtones, shadows, anti-aliasing, banding, baseline, Bezier curve, bleed, calibration, cast, channel, color separations, color wheel, compression, crop , clipping group, warp, lossy compression, non-lossy compression.

## Skills

Demonstrate the program abilities of Photoshop by exploring

.jpeg, .bmp, .psd, .tiff file formats, storage size and quality of an image through the creation of project files.

Demonstrate the program abilities of Photoshop by exploring

a proprietary camera raw image, and use of the vanishing point filter when completing project files.

Create Photoshop files.

Explore Adobe Photoshop.

Develop creative expression through the creation of custom images in Photoshop projects.

Perform best practices when electronically saving work.

## Resources

cameras, internet access, dvd player, dvd tutorial, sim cardreaders

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.

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| 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.1 | Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources. |
| 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. |

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| TECH.8.1.12.B.CS1 | Apply existing knowledge to generate new ideas, products, or processes. |
| TECH.8.1.12.B.CS2 | Create original works as a means of personal or group expression. |
| 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.CS3 | The relationships among technologies and the connections between technology and other fields of study. |
| 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.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). |