

Timing: 2 to 3 hours

Level: Ages 15 and up

Working with CSS

Activity Overview

Cascading Style Sheets (CSS) is a collection of formatting rules that control the appearance of content in a web page. CSS allows for easy maintenance and updating of a web site because you can make global changes from a central location. In this activity student learn to design with CSS by creating div tags, CSS rules, style sheets, and starter layouts.

Note: Portions of this activity align to the Adobe Certified Associate objectives. Within the instruction steps and technical guides, the specific learning objectives for the exam(s) are referenced with the following format: ^{1.1}

Activity Objectives

Design skills

- Creating web pages using web standards
- Designing with CSS
- Organizing pages with CSS

Technical skills

Dreamweaver

- Editing and customizing CSS rules
- Using the CSS Designer panel
- Using CSS starter layouts
- Using CSS text styles
- Creating, modifying, and troubleshooting Cascading Style Sheets
- Using Live View

Project Assets

- *Dreamweaver guide:* How to lay out a web page with CSS ^{5.2}
- *Dreamweaver guide:* How to create and edit a CSS rule ^{3.3, 5.1, 5.2, 5.8}
- *Dreamweaver guide:* How to use CSS text styles ^{5.3, 5.8}
- *Dreamweaver guide:* How to use CSS starter layouts ^{5.8}
- *Dreamweaver guide:* How to work with external Cascading Style Sheets ^{5.8}
- *Dreamweaver guide:* How to troubleshoot Cascading Style Sheets ^{5.8}

Background preparation resources

[Technical and content information](#)

[ISTE NETS*S Standards for Students](#)

[Adobe Certified Associate objectives](#)

Activity Steps

1. Introduce students to the goals of the activity:

- Cascading Style Sheets (CSS) is a collection of formatting rules that control the appearance of content (such as HTML tags) in a web page - CSS is the (visual and aural) *layout*, for a variety of devices.
- In CSS, a style is simply a rule describing how to format content on a web page. A CSS (style sheet) is a collection of these rules.
- Why separating content (the HTML code and tags) from presentation (the CSS rules) is important and allows for easy maintenance and updating of a web site.
- Ways of designing with CSS, including creating div tags, CSS rules, style sheets, and starter layouts.

Note: It is recommended that students have already completed the *Introduction to HTML and CSS* activity.

1. Discuss and explain the following about CSS:

- How to control the design and layout of a page by placing div tags and then adding content to them. If students have already created wireframes, explain that the rectangles students drew for images, text blocks, and navigation on their wireframes represent div tags in their Dreamweaver documents.
- The difference between absolute, relative, fixed, and static positioning of div tags.
- How students can use CSS3 to create web-page layout features such as tabs, animated drop-down menus, accordions, and responsive designs.
- How students can control text styles using CSS text styles.

Note: You might discuss the use of tables in the past for web-page layout. Explain to students that using div tags instead of tables creates a cleaner implementation of design and that CSS-based layouts are now the standard layout method in professional web design.

2. Using the "I do, we do, you do" method, demonstrate how to place div tags, If students have already created wireframes, place the div tags corresponding to the blocks of information they sketched in their wireframes. ^{2.5}

Dreamweaver guide: How to lay out a web page with CSS ^{5.2}

3. Using a Cascading Style Sheet file, demonstrate how to open it from the CSS Designer panel. Using the CSS file, go through the features on the CSS Designer panel to show students the types of styles and rules used to create the CSS.

4. Using the "I do, we do, you do" method, demonstrate the following technical skills:

- How to customize the CSS file by selecting a style in the CSS Designer panel and make changes to an existing property.
- How to make a change to the features of the style to see how the change is implemented on the page. (They can click Apply to see changes without closing the dialog box if they use the Edit Style button.)
- How to use the CSS Designer panel to create and edit CSS rules ^{5.8}
- How to create a new style and add it to the CSS file.
- How to use the Properties panel to apply a style to a paragraph ^{3.3, 5.3}
- How to use the Properties panel to set off a block quotation by indenting it ^{3.3, 5.3}

Dreamweaver guide: How to create and edit a CSS rule ^{3.3, 5.1, 5.2, 5.8}

Note: Depending on the level of your students, you may want to discuss vendor prefixes. Until web standards are accepted across all modern web browsers, vendor prefixes are often needed within CSS style sheets.

5. Discuss how using CSS text styles and web-hosted fonts creates consistency in a web project. Demonstrate the following:
 - How to use CSS text styles to define text styles across their websites.
 - Demonstrate how to access and use web-hosted fonts.

Dreamweaver guide: How to use CSS text styles ^{5.3, 5.8}
6. Demonstrate how to use Live view to see how their style changes will look and function according to changes they make to the CSS file. ^{5.2}
7. Discuss the option for setting up a web project with CSS by demonstrating how to use and modify CSS starter layouts. ^{5.8}

Dreamweaver guide: How to use CSS starter layouts ^{5.8}
8. Using the "I do, we do, you do" method, demonstrate the following:
 - How to use internal and embedded style sheets.
 - How to turn internal styles into a new external style sheet.
 - How to create external style sheets.

Dreamweaver guide: How to work with external Cascading Style Sheets ^{5.8}

Note: If working on a specific web-based project, ask students to start creating external style sheets for their sites as they follow along with the demonstration.
9. Using the "I do, we do, you do" method, discuss and demonstrate the following:
 - Code Navigator, CSS Inspect, and Live view as useful tools for identifying the CSS rules applied to a web page.
 - How to use selector types such as descendent selectors, classes, the tag selector, pseudo class selectors, and group selectors.
 - How they can troubleshoot CSS issues by using tools such as CSS layout backgrounds.

Dreamweaver guide: How to troubleshoot Cascading Style Sheets ^{5.8}
10. Using what they've learned, ask students to build a web page(s) using CSS and create an external CSS file that can be applied to other web pages. Alternatively, they can build a web page for a project they are currently working on.

Note: If they have created wireframes or design documents for a particular project have them use those to implement the styles required for their project.
11. Ask students to share their web pages, explaining the design decisions they made and how the external CSS file can be applied to additional web pages. Ask students to share what they learned about CSS, what they learned about how CSS allows for easy maintenance and updating of a web site, and ways they plan to use CSS in future web projects.

Assessment:

	0 – Does not meet expectations	3 – Meets expectations	5 – Exceeds expectations
Web page with external CSS file	Absent or incomplete.	Student understands CSS styles and uses them to customize or create a web page. Student creates CSS styles, using a combination of redefined styles and new styles. Student creates an external CSS file that can be applied to other web pages.	Student understands and clearly articulates CSS styles and their uses in customizing or creating a web page. Student creates CSS styles, using a combination of redefined styles and new styles. Student creates an external CSS file that can be applied to other web pages.

Background preparation resources:

- To view video tutorials aligned with the skills required to complete this project, visit Adobe TV: <http://tv.adobe.com>
- For more teaching and learning resources on the topics in this project, search for resources from the community on the Adobe Education Exchange: <http://edex.adobe.com/>
- For an overview of the interface and for more information on the technical aspects of *Adobe Dreamweaver*, see *Dreamweaver Help*.

CSS

- Basic and advanced techniques of Cascading Style Sheets: the CSS Technology Center at www.adobe.com/devnet/dreamweaver/css.html
- CSS Zen Garden. A demonstration of what can be accomplished through CSS-based design: www.csszengarden.com/

ISTE NETS*S Standards for Students

This project is aligned to the ISTE NETS*S Technology Standards. Depending on the subject and content area the student selects you may research your own state content standards to see how this project aligns to your state requirements.

ISTE NETS*S: Curriculum and Content Area Standards – NETS for Students

6. Technology Operations and Concepts
Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:
 - a. understand and use technology systems.
 - b. select and use applications effectively and productively.
 - d. transfer current knowledge to learning of new technologies.

Adobe Certified Associate Exam Objectives

Adobe Certified Associate, Web Authoring objectives

- 2.5 Demonstrate knowledge of flowcharts, storyboards, wireframes, and design comps to create web pages and a site map (site index) that maintain the planned website hierarchy.
- 3.3 Use the Property inspector.
- 5.1 Set and modify document properties.
- 5.2 Organize web page layout with relative and absolutely-positioned div tags and CSS styles.
- 5.3 Modify text and text properties.
- 5.8 Use CSS to implement a reusable design.

For more information

Find more teaching materials for using Adobe software in your classroom on the Adobe Education Exchange: <http://edex.adobe.com/>.



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