

Web Technologies: Grades 10, 11, 12

Adopted 2013

Intro to Web Pages and the WWW

1.1 Define terminology

1. Prepare a list of terms with definitions 1.1.1
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1.2 Identify common web page elements

1. Examine existing web sites for any of the following:
 - URL
 - hyperlinks
 - title
 - navigation 1.2.1
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1.3 Identify different browsers

1. Open existing web sites in different browsers 1.3.1
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1.4 Discuss HTML

1. View the source code of existing web sites 1.4.1
 2. Discuss the history of HTML 1.4.2
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1.5 Discuss XHTML

1. Discuss the differences between HTML and XHTML 1.5.1
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Create Web pages using HTML, XHTML, and CSS

2.1 Define terminology

1. Prepare a list of terms with definitions 2.1.1
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2.2 Identify parts of a basic web page

1. Create web pages with the following:
 - Head, Title, and Body Elements
 - Paragraph element
 - Ordered, unordered or definition lists
 - Graphics, font styles, horizontal ruled lines 2.2.1
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2.3 Discuss ways to add navigation to a Web site

1. Create web pages with these navigations:
 - identify elements or anchors
 - links between pages
 - pictures as links
 - mail to link
 - link to another website 2.3.1

2.4 Describe ways to enhance a web page

1. Add color to the background of a web page [2.4.1](#)
 2. Add various font styles adding color, size, font-family, etc [2.4.2](#)
 3. Insert and format graphics [2.4.3](#)
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2.5 Identify uses of image maps

1. Create hot spots and image maps [2.5.1](#)
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2.6 Describe the importance of using tables in web design

1. Create tables for text and graphics [2.6.1](#)
 2. Discuss how to layout a website using a table [2.6.2](#)
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2.7 Discuss the importance of CSS

1. Compare/Contrast styles: Inline, Embedded, and External [2.7.1](#)
 2. Write the code necessary to create an inline style, embedded style, and an external style sheet [2.7.2](#)
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Exploring Graphics in PhotoShop

3.1 Define terminology

1. Prepare a list of terms with definitions [3.1.1](#)
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3.2 Discuss the PhotoShop environment

1. Identify the parts of the environment [3.2.1](#)
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3.3 Identify various methods used to obtain, edit and repair

1. Obtain pictures from the Internet and/or a digital camera [3.3.1](#)
 2. Edit and repair graphics using some of these tools: layer styles, filters, eye dropper tool, blending, liquify, marquee tool, transparent backgrounds, clone stamp tool, free transform, opacity, red eye tool, and more [3.3.2](#)
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3.4 Explain various color techniques

1. Explain the difference between RGB and CMYK [3.4.1](#)
 2. Edit colors in a graphic [3.4.2](#)
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3.5 Explain various typography

1. Insert and format text [3.5.1](#)
 2. Explain why you need to rasterize text [3.5.2](#)
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3.6 Discuss various formats for saving graphics

1. Save graphics as a GIF, JPEG, PNG and more [3.6.1](#)
2. Optimize graphics for the web [3.6.2](#)

3.7 Explain how to use layers

1. Create a graphic using multiple layers [3.7.1](#)
 2. Flatten the graphic before saving [3.7.2](#)
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3.8 Discuss types of graphics that can be created for the web

1. Create a graphic for use on a website, such as a banner, logo, web template, etc. [3.8.1](#)
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Creating Animations in Flash

4.1 Define terminology

1. Prepare a list of terms with definitions [4.1.1](#)
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4.2 Identify the environment

1. Identify many of the parts of the environment [4.2.1](#)
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4.3 Describe how to insert and transform text and graphics

1. Add and format text using some of these: aligning, colors, size, skew, gradient and more [4.3.1](#)
 2. Use the drawing tools to create various objects [4.3.2](#)
 3. Resize, rotate, skew, distort and flip an object [4.3.3](#)
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4.4 Describe the steps necessary to create a tween

1. Create a motion tween [4.4.1](#)
 2. Create a shape tween [4.4.2](#)
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4.5 Discuss reasons for symbols

1. Create graphic, button or movie clip symbols [4.5.1](#)
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4.6 Explain different kind of actions

1. Write introductory level ActionScript [4.6.1](#)
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4.7 Explain how to create a frame-by-frame animation

1. Create a frame-by-frame animation [4.7.1](#)
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4.8 Explain how to create a motion guide for an object

1. Create a motion guide for an object and orient the object to the path [4.8.1](#)
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4.9 Discuss the steps necessary to create a mask effect

1. Create a mask effect [4.9.1](#)
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4.10 Explain different ways to add sound to a video

1. Add sound to a video [4.10.1](#)

4.11 Discuss why you should use scenes when creating a long movie

1. Create a video with multiple scenes [4.11.1](#)

4.12 Describe how to publish and export a movie

1. Publish a video using several different options [4.12.1](#)
2. Export a video [4.12.2](#)

Understanding Sound

5.1 Define terminology

1. Prepare a list of terms with definitions [5.1.1](#)

5.2 Discuss audio and audio formats

1. Locate and play various different sound files [5.2.1](#)
2. Record sound using a sound recorder [5.2.2](#)

5.3 Explain how to edit music files

1. Open or import music files and edit them using an audio editor [5.3.1](#)
2. Use various editing techniques such as fade in/fade out, cut or razor, and other audio effects [5.3.2](#)

5.4 Explain ways to save audio files

1. Save audio files in different formats [5.4.1](#)

Editing Video

6.1 Define terminology

1. Prepare a list of terms with definitions [6.1.1](#)

6.2 Discuss video and video formats

1. Obtain videos from the Internet, other sources, and/or a digital camcorder [6.2.1](#)
2. Explain each of these formats: AVI, MPEG, MOV, RAM, OR WMV [6.2.2](#)

6.3 Explain the difference between linear and nonlinear

1. Compare/Contrast linear and nonlinear [6.3.1](#)

6.4 Explain how to edit video files

1. Open or import video files and edit them using a video editor [6.4.1](#)
2. Use various editing techniques: video effects, transitions, razor, slow motion, and others [6.4.2](#)

6.5 Explain ways to save video files

1. Save video in different formats [6.5.1](#)
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7.1 Define terminology

1. Prepare a list of terms with definitions [7.1.1](#)
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7.2 Identify website requirements needs

1. Identify the purpose, audience, and audience needs for the website [7.2.1](#)
 2. Discuss web page content that is relevant to the website purpose and appropriate for target audience [7.2.2](#)
 3. List reasons for copyright laws [7.2.3](#)
 4. Demonstrate knowledge of website accessibility standards [7.2.4](#)
 5. Make website development decisions based on analysis and interpretation of design specifications [7.2.5](#)
 6. Understand project management tasks and responsibilities [7.2.6](#)
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7.3 Demonstrate best practices for designing a website

1. Discuss the best practices for designing a website including the following: maintaining consistency separating content from design, visual hierarchy, font decisions, web-safe colors, and more [7.3.1](#)
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7.4 Discuss the importance of testing websites

1. Produce website designs that work equally well on various operating systems [7.4.1](#)
 2. Produce website designs that work equally well on various browsers [7.4.2](#)
 3. Produce website designs that work equally well with various resolutions and window sizes [7.4.3](#)
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7.5 Identify good page layout design concepts and principles

1. Discuss good page layout design concepts and design [7.5.1](#)
 2. Develop a site concept and site metaphor [7.5.2](#)
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7.6 Discuss usability, readability, and accessibility needs in the website plan

1. Incorporate basic usability, readability, and accessibility principles into a website design [7.6.1](#)
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7.7 Demonstrate tools to help organize a website

1. Demonstrate knowledge of flowcharts, storyboards, and wireframes [7.7.1](#)
 2. Demonstrate knowledge of a site map or index [7.7.2](#)
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7.8 Demonstrate communication of design and content plans with other

1. Present your design and content plans to others [7.8.1](#)
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8.1 Define terminology

1. Prepare a list of terms with definitions [8.1.1](#)
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8.2 Identify the parts of the environment

1. Identify various windows, views, panels and toolbars [8.2.1](#)
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8.3 Describe how to create a site

1. Create a local root folder [8.3.1](#)
 2. Create a site definition [8.3.2](#)
 3. Create and save an index page [8.3.3](#)
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8.4 Identify ways to add and format text

1. Add text to a web page [8.4.1](#)
 2. Add various formatting options to text [8.4.2](#)
 3. Format and create text using lists--unordered, ordered, or definition [8.4.3](#)
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8.5 Identify ways to insert and format images

1. Insert and format graphics with alternative text [8.5.1](#)
 2. Add borders to graphics [8.5.2](#)
 3. Set the vertical or horizontal spacing to images [8.5.3](#)
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8.6 Identify ways to link web content

1. Create links using text and images [8.6.1](#)
 2. Create email links [8.6.2](#)
 3. Create anchors [8.6.3](#)
 4. Compare/Contract absolute and relative paths [8.6.4](#)
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8.7 Explain how to insert rich media

1. Insert video, sound and animation into a website [8.7.1](#)
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8.8 Discuss ways to add navigation to a website

1. Create at least one of these navigation structures: navigaton bars, rollover images, objects, buttons created in Fireworks OR Spry menu bars [8.8.1](#)
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8.9 Discuss uses of image maps

1. Create hotspots and image maps on a webpage [8.9.1](#)

8.10 Discuss uses of tables in websites

1. Import a table into a web page [8.10.1](#)
 2. Create and format tables on a web page using some of these features: merge, split, header, cell padding, cell spacing, and borders [8.10.2](#)
 3. Use tables for web page layout [8.10.3](#)
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8.11 Explain how to import a document

1. Import a document [8.11.1](#)
 2. Import a document [8.11.2](#)
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8.12 Explain how to add a form to a web page

1. Create and format a form using some of these form features: text fields, checkbox, radio button, list menu, etc. [8.12.1](#)
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8.13 Discuss dynamic web pages

1. Explore how to make a web site dynamic [8.13.1](#)
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Organizing Content using Dreamweaver

9.1 Define terminology

1. Prepare a list of terms with definitions [9.1.1](#)
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9.2 Discuss web page layout

1. Differentiate between fixed-width, liquid, and elastic layouts [9.2.1](#)
 2. Create web pages using various layout absolutely-positioned div tags CSS tables wrapper/container div tags [9.2.2](#)
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9.3 Discuss web page templates

1. Create a web site using one of the templates [9.3.1](#)
 2. Create and modify a web page template [9.3.2](#)
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9.4 Discuss the importance of making a web page visible to search engines

1. Create appropriate meta tags for a website [9.4.1](#)
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Evaluating and Maintaining a Site by Using Dreamweaver

10.1 Define terminology

1. Prepare a list of terms with definitions [10.1.1](#)
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10.2 Identify basic technical tests

1. Use various technical tests on a website [10.2.1](#)
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10.3 Identify techniques for basic usability tests

1. Use some of these tests: Accessibility report, check for missing alternate text [10.3.1](#)

10.4 Identify methods for collecting site feedback

1. Collect site feedback from various sources [10.4.1](#)

10.5 Manage assets, links, and files for a site

1. Use some of these tests on a website: check for broken links, orphaned files, check links sitewide, untitled documents, web-safe colors, site map, validating markup and more [10.5.1](#)

10.6 Discuss steps necessary to publish a web site

1. Identify steps necessary to publish a website [10.6.1](#)
2. Explain the difference between uploading and downloading [10.6.2](#)
3. Explain what it means to synchronize files [10.6.3](#)

10.7 Explain ways to manage a website with a team

1. Explain checking in/out files [10.7.1](#)