

## HTML Practice 5

### Adding Images and Color to Pages

**Objectives:** Images are used frequently on web pages. They can be used to add needed information and graphical features. This practice will help you become familiar with the inline image tag `<img>`. You will use this tag to place images, manage image alignment, and wrapping of text. We will also learn how to apply color formatting to text and a web page using embedded CSS. Alignment and padding of images should also be done with CSS instead of using HTML attributes.

You may use the text editor of your choice for this practice.

**Step 1. Getting Started:**

Find the HTML5.zip file and download it to your desktop.  
Open the zipped file and copy the HTML5 folder to your computer.

**Step 2.** Open the Images folder. Inside the Thumbnails folder are small butterfly images that we will refer to as thumbnails. Small images are often used on a page so they will load quickly. Inside the Fullsize folder, are larger images which will take longer to load in the browser. If the viewer wants to see the larger image, they can click on the thumbnail to open the page with the larger image. When you provide the path to an image, you should use the relative path using these folder names. Each set of butterfly images have been modified in a graphics program so they share the same width and height.

**Note:** When you use HTML attributes or CSS to scale images up or down in size, you must still download the same size image file. The browser will just display it to look smaller or larger. It is always most efficient to resize the image in a graphic program so the file size can be smaller if you want to scale down an image. Scaling up an image like a JPEG with HTML attributes or CSS can create a pixilated looking image in the browser.

**Step 3. Adding Style Rules:**

Open the index.html file found in your HTML5 folder in a browser so you can see the page content.

We will first add some CSS style rules to add color and other CSS to manipulate page images. We will add these style rules to the embedded style sheet in the head of the page, and then we will add thumbnail images to this page using the <img> HTML tag.

Add a body selector to the embedded style sheet. For now, just set the font-family you would like for the page. We will set some color properties later in this practice.

```
body{ font-family: Arial, Helvetica, sans-serif;
}
```

Next we will add two CSS classes to the embedded style sheet we can use to float an image to the left or right. The CSS float property removes an element from the normal flow of content in the window. Other content will wrap around floated images or other content.

We will also add some padding to the right or left in this class.

```
.thumbnailleft { float: left;
                  padding-right: 10px;
}
.thumbnailright { float: right;
                  padding-left: 10px;
}
```

#### Step 4. Adding Thumbnail Images:

Add the FritillarySm.jpg thumbnail image before the first <h2> heading on the page using the <img> tag. What would be the relative src path to this image? We need to go into the Images/Thumbnails/ folders and then use the image filename...

Add alt text for this image. If we decide we want this image to float to the left, we should add the thumbnailleft CSS class to the <img>.

```

```

**Note:** Each <img> tag must have an alt attribute or it will not validate.

If you add the exact width and height HTML attributes to an image, the browser can build the page around it as the image is loading. These thumbnails have been sized with an exact width of 100px and an exact height of 71px.

```

```

**Note:** If you do not know the width and height of an image, you can right-click on it in the folder and choose properties and examine the details to see the width and height in pixels.

Add the MonarchSm.jpg thumbnail image at the beginning of the first paragraph in the Monarch section. Use the CSS thumbnaillleft class to float this image to the left. The <img> tag will be similar to the tag above. Don't forget the alt text, width and height HTML attributes.

Add the ChrysalisSm.jpg thumbnail image at the beginning of the paragraph that talks about the chrysalis stage of the Monarch. Use the thumbnailright CSS class to float this image to the right. The <img> tag will be similar to those above. Add the alt text, width and height HTML attributes.

Add the TigerSm.jpg thumbnail image at the beginning of the paragraph in the Swallowtails section. Use the thumbnaillleft CSS class to float this image to the left. Add the alt text, width and height HTML attributes.

Add the ZebraSm.jpg thumbnail image at the beginning of the paragraph that talks about zebra swallowtails. Use the thumbnailright CSS class to float this image to the right. Add the alt text, width and height HTML attributes.

Finally, add the MorphoSm.jpg thumbnail image at the beginning of the paragraph that talks about the Blue Morpho butterfly. Use the thumbnaillleft CSS class to float this image to the left. Add the alt text, width and height HTML attributes.

Save your changes to the index.html page and view it in the browser. If you don't like where an image is positioned, you can move it to another place in the paragraph or decide to float it to the left or right using the other CSS class.

#### Step 5. Adding Fullsize Images:

Next we will add the fullsize images to each of the butterfly pages. The reason we are creating pages for each of these images is so we can add navigation links back to the home page and other information that might be needed. The exact width and height of each of these fullsize images are 350px width and 250px height.

Open the Fritillary.html page in a text editor. Notice, the CSS embedded style sheet had already been added to each of these pages with a body and h1 selector. Add these fullsize images just below the <h1> headings on each of the corresponding pages.

Add the FritillaryLg.jpg to the Fritillary.html page using the <img> tag. Add the alt text, width and height HTML attributes to the <img> tag.

```

```

Save the Fritillary.html file.

Open the Monarch.html file and add the MonarchLg.jpg image to the file using the <img> tag. Add the alt text, width and height HTML attributes to the <img> tag. This tag will be similar to the one above. Save the Monarch.html file.

Open the Chrysalis.html file and add the ChrysalisLg.jpg image to the file using the <img> tag. Add the alt text, width and height HTML attributes to the <img> tag. This tag will be similar to the one above. Save the Chrysalis.html file.

The rest of the fullsize butterfly pages have already been completed for you.

#### Step 6. Creating Image Links:

Next we will return to the index.html page and add a link from each image to the corresponding butterfly page with the fullsize image.

Place an <a> around the <img> tag for the FritillarySm.jpg. There is no hypertext, so just close the anchor tag after the <img> tag.

Set the href to be the Fritillary.html file.

```
<a href="Fritillary.html"></a>
```

Repeat this process of adding an <a> around each thumbnail image on the index.html page.

Save the index.html file. Open the file in a browser and now test your links from each image to the fullsize butterfly pages. You can use the Return to Home Page link on each of these pages to return to the index.html page.

#### Step 7. Choosing a Color Scheme:

A resource you can use to help you in selecting an aesthetically pleasing color scheme for a Web site is the Color Scheme Designer (New Version) This tool has many of the features we want to use for our sites this semester. The URL for this Web site is [paletton.com](http://paletton.com).

Because this practice Web site has information and images about butterflies, the color scheme should reflect the natural world. You need to decide to go with a

dark background and light text or dark text and a light background. With these butterfly images, a light background will probably look better. There are several color schemes you could use: Mono(monochrome), Complement, Triad, Tetrad, or Analogic. Notice each of these schemes uses the color wheel and selects colors from different scheme points depending on the scheme. The color in the middle of the color wheel will be the dominant color on the right side.

You can drag the different scheme points to adjust the angles used in the scheme or change the dominant color.

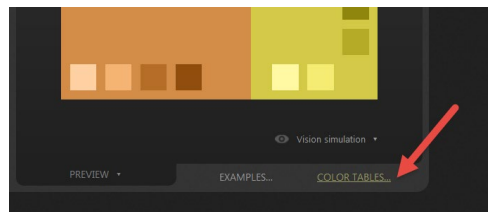
Note: Usually when choosing a color scheme for an entire Web site, you want a group of colors that support the look visitors are expecting of the site. Also make sure you have some accent colors so parts of your page will stand out, like links, or other important content. For this reason, the Monochromatic scheme usually does NOT provide the depth of colors needed for most Web sites.

Using the **Presets** tab, you could choose more contrast, less contrast, etc. You can also view the **Colors** tab to see the colors in the scheme and their hexadecimal values. You can then use the **Examples** tab to view two example Web pages can be viewed: a light or dark version of a Web page using this scheme.

#### Step 8. Exporting Your Color Palette:

Experiment until you find a color scheme you like for this web site.

There is no absolute right or wrong scheme, but tools like this can help us to find colors that work well together and can help us achieve the impact we want from our site. Once you have decided on a color scheme, export it by clicking on the Color Tables tab in the lower right-hand corner of the page.

A screenshot of the Paletton export page. On the left, a dark sidebar contains a 'Color list' dropdown menu with options: 'as HTML', 'as CSS', 'as LESS', 'as XML', and 'as text'. A red arrow points to 'as HTML'. Below this are links for 'Color swatches' and 'Color combinations'. The main content area shows the 'Color Palette by Paletton.com' with a table of color swatches and their hexadecimal values. A red arrow points to the browser's address bar showing the URL: http://paletton.com/#uid=5111a1k1e9tbf7KqVulpcmGnhZ.

	#F0D1A3	#F5E7D3	#D9C947	#B5A816	#B58000
Primary color:	#F0D1A3	#F5E7D3	#D9C947	#B5A816	#B58000
Secondary color (1):	#B5D596	#5BB86A	#35A149	#1DBA30	#0A6E18
Secondary color (2):	#F0D1A3	#F5E7D3	#D9C947	#B5A816	#B58000

Primary color: [swatch] [swatch] [swatch] [swatch] [swatch]  
Secondary color (1): [swatch] [swatch] [swatch] [swatch] [swatch]  
Secondary color (2): [swatch] [swatch] [swatch] [swatch] [swatch]

We should choose hexadecimal colors from your color scheme for the following:

- page background color
- page default text color
- default link text color
- link visited text color
- link hover text color

Note: If you wanted you could add heading selectors to the embedded style sheet and also choose a color for these headings.  
Remember to choose text and link colors that will give you good contrast with your background color.

**Step 9. Adding Color to Style Rules:**

Open the index.html page in a text editor.

In the embedded style sheet, add the background-color and color for the text in the body selector.

The hexadecimal number value for a color needs to use the # symbol with the number.

Add new anchor pseudo-class style rules to the style sheet. First add the a:link style rule, set the default link color.

Add the a:visited style rule and set the visited link color.

Finally, add the a:hover style rule and set the hover link color.

Save your index.html page and view it in the web browser. You may need to clear your history in the browser to get your link colors to show.

**Step 10. Make sure your SiteDesign.html page is in your HTML5 folder.**

This page can serve as a reminder of your color palette if you need to go back and change your color choices or use the same color in more than one place in your style sheet.

**Step 11. Validate the index.html page. Do not try to validate the SiteDesign.html page.**

**Step 12. Upload your entire HTML5 folder to your Practices folder on the Yoda web server.**

**Conclusion:** Images can add interest and information to a site. Often smaller thumbnail size images are used as an index to fullsize images in order to save on the time it takes to load your pages. If the viewer is really interested in seeing the fullsize graphic, then they will take the time to wait for it to load. If you are artistically challenged, a tool that uses a color wheel and different schemes to build a color pallet can be invaluable.

Planning a color scheme for a Web site should at least include a background color, text color and color for the different link states. The key to readability of a page depends on having enough contrast between the text/link color and the background color.

**Submission:** Upload this practice to the yoda server.