**Lesson 2: What is CSS?**

**The Set Up:**

***Preparation:***

Leave open (or reopen) your “html\_formatting” and “css\_formatting” .html documents. As you read through and/or discuss the information below, make sure you check these two documents out so that you have a visual representation of the different types of CSS and how they are displayed in Dreamweaver. Once you have read through and understood the information below, complete “The Doing” activity at the end of this lesson, then show it to Ms. Hammond.

**The Learning:**

***Types of CSS***

* Content vs. Form: It has become increasingly important, in Web Design, to separate a website’s content from its formatting. This makes the site easier to design, collaborate, navigate, find errors, and edit!
* CSS’s Role: CSS does its work by stepping between the HTML and the browser, redefining how each element should be rendered (appear on the screen).
* There are 3 types of CSS: Inline, Internal (aka embedded) or External (aka linked). We covered “Inline” CSS in the previous HTML unit, now we will be moving on to “Internal” CSS (though some “External” CSS will be explored, as well).
	+ **Inline CSS** – CSS placed throughout the <body></body> of the html document, so no real “cascading” occurs. Instead, the style codes appear within the tags of the html elements, themselves. For example:
		- <p></p> or <h2></h2> or <body></body>
	+ **Internal CSS** – CSS is placed in the <head></head> of the html document, the actual cascading styles being placed between <style></style> tags:
		- <style></style>
	+ **External CSS** – link to .css document is placed in the <head></head> of the .html document, the link being placed within a <link> tag (empty). Note: these link tags have 3 mandatory attributes which are formatted like so:
		- <link rel=“stylesheet” type=“text/css” href=“mystyle.css”></link>

***Inline CSS Formatting***

* Internal CSS Formatting is similar to inline CSS formatting in that it uses a version of the “tag”-“attribute” combination we are used to. It is different in that we now use selectors instead of placing the CSS directly inside our elements’ tags, and that we format it in a style known as “cascading” (where CSS takes its name from), rather than “inline.”
* Selector {Declaration}: The element tag becomes the “**selector**” and the attributes within this tag become the “**declaration**.” The declaration contains the “**property**” and its “**value**” (which is formatted in the same was as inline CSS).
* A CSS formatting instruction is called a “rule”; a rule consists of 2 parts:
	+ **Selector** – identifies what element/combination of elements is to be formatted
	+ **Declaration** – contains the formatting specifications; enclosed in curly brackets. A declaration consists of two parts (formatted just like inline styles):
		- **Property** – the aspect of the selector you’d like to change
		- **Value** – the specific way in which you would like to change the property
	+ Sample CSS Rule Construction:
		- HTML Element P {color:red; font-family:Verdana;}
		- Multiple HTML Elements Th,td {font-weight:bold; padding:4px}
		- Descendent Div p {font-size:95%; margin-top:5px}
		- Class .ctr {text-align:center; line-height:16px}
		- ID #hdr {background-color:black; color:red}
	+ CSS Rules can redefine the way any HTML element, ID, Class, or Descendent (don’t worry - we will learn more about these later) appears.
* Instead of using <> (angled) brackets, we use {} (curly) brackets. The spacing between each portion of the CSS does not matter – it is usually determined by personal preference or by the html editor you use (ex. Dreamweaver). Example:

selector { p {

 property:value; color:red; font-family:Verdana;

} }

 **OR**

selector { property:value; property:value; }

p { color:red; font-family:Verdana; }

***CSS Box Model***

CSS places an imaginary box around each element and then enables you to format almost every aspect of how that box and its contents are displayed. Unless otherwise specified, the elements listed below are invisible to the user. The different elements included in each box are as follows:

* Top border, right border, bottom border, left border
* Top margin, right margin, bottom margin, left margin
* Left padding, top padding, right padding, bottom padding
* HTML tags (in the center of the box)



**The Doing:**

***Mozilla Thimble Activity:*** [***Keep Calm Poster***](https://thimble.mozilla.org/en-US/anonymous/a7acdf7c-7792-4491-a743-ae8c18a67f9b/72)

Activity Instructions: Visit the Thimble “Keep Calm Poster” link (above) – FYI the CSS within this activity is External CSS. To learn more about what Thimble is and how to use its interface, see the [Welcome to Thimble video](https://www.youtube.com/watch?v=JecFOjD9I3k). Explore the HTML and CSS documents to get a feel for how they are formatted, and how they work together. Follow the tutorial instructions to “remix” the poster using what you already know about CSS. Once you are finished, show Ms. Hammond your product, and explain the changes you’ve made and what you’ve learned about CSS formatting, so far.

* Note: Once you have opened the Mozilla Thimble activity, compare and contrast the layout, options, and functionality of Dreamweaver vs. Thimble. Like Dreamweaver, Mozilla Thimble is an HTML editor. It is much simpler than Dreamweaver, but it is FREE and available online.
* Test out some different CSS formatting options by visiting [W3Schools CSS Tutorials Page](http://www.w3schools.com/css/default.asp) or [W3Schools CSS Property Reference Page](http://www.w3schools.com/cssref/). Check out: Colors, Backgrounds, Borders, Margins, Padding, Height/Width, Text, Fonts

If you have extra time, try making your own [Thimble page from scratch](https://thimble.mozilla.org/en-US/anonymous/18efdfe6-3533-48e7-b9c8-51fd4e80af35)!

***Comprehension Question:***

* What is the difference between were Internal vs. Inline CSS appears?
* What are the advantages to using Internal CSS, compared to Inline?
* What do you think the pros/cons of using Internal vs. External CSS would be?
* When formatting Internal CSS, what do we call the “element” we want to modify? What do we call the “property-value” pairing?
* What are the three parts of the CSS box model?
* Which part of the box model is closest to the content? Furthest?
* What are the pros and cons of using Mozilla Thimble vs. Adobe Dreamweaver?