**Lesson 5: Formatting Objects**

**The Set Up:**

***Preparation:***

Navigate to my Shared folder. Copy the “02formatting\_objects” folder to the “practise” folder inside your “css” folder. Open Dreamweaver. In Dreamweaver, click File > Open, then open the “width.html,” “height.html,” “borders.html,” “margins\_padding.html, ”and “backgrounds.html,” documents from within the “02formatting\_objects” folder you’ve just added to your “css” folder. Read through the information below, then follow along with the “formatting\_objects.pdf” instructions provided in the Shared drive (Hammond > Handout > Web Design > Formatting Objects). Read through each of the sections contained within the “formatting\_objects.pdf” document, and make changes to the appropriate html document in Dreamweaver as you read. Once you’re done making changes, play around with the property values to gain a better understanding of how each works!

**The Learning:**

***Object Formatting***

* Object Formatting: Refers to properties that format parts of html elements other than text. “Object” properties include: size, background, borders, margins, padding, and positioning.
* Application: Though it can be applied to any HTML element, it is most commonly applied to the <div> element, since it is most commonly applied to separate sections.
* Units of Measurement: Object properties can be specified using either absolute (ex. pixels or ems) or relative (ex. % or ems) units of measurements
  + Percentage (%) = percentage of browser space taken up
  + Pixels (px) = amount of pixels taken up
  + Ems (em) = relative to the font-size of the element

***Major Object Formatting Items***

In the table below, you will find some key information about each of the main Object Formatting items (Note: “Default Display” refers to how the element appears naturally, when no CSS styling is applied).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **OBJECT** | **DEFINITION** | **PROPERTY** | **EXAMPLE** | **UNIT** | **DEFAULT** |
| [Background](http://www.w3schools.com/css/css_background.asp) | the way the background appears behind an element’s content | background  background-color  background-image  background-repeat  background-attachment | {background #00000 url(“cat.png”);}  or  {background-color: black;} | N/A | “invisible” or white background behind elements |
| [Width](https://www.w3schools.com/cssref/pr_dim_width.asp) | the overall width of an element (i.e. the amount of horizontal space it takes up across the browser window) | width | {width: 50%;}  or  {width: 750 px;} | %  px  em | 100% of the browser’s width |
| [Height](https://www.w3schools.com/cssref/pr_dim_height.asp) | the overall height of an element (i.e. the amount of vertical space it takes up up and down the browser window) | height | {height: 50%;}  or  {height: 750 px;} | %\*\*\*  px  em | only as much height as the content within the element requires |
| [Border](http://www.w3schools.com/css/css_border.asp) | four visible lines (the top, right, bottom, left – in that order) that, when used together, produce a box surrounding an element’s padding. There are MANY different properties and values to consider when working with borders | Can be applied to all sides:  border  border-style  border-color  border-width  [border-radius](https://www.w3schools.com/cssref/css3_pr_border-radius.asp)  or  Can be applied to 1 side:  border-top  border-top-style  border-top-color  border-top-width | {border: 5px solid red;}  or  {border-top-style: dotted;}  or  {border: 5px 10px 5px 10px;} | px  pt  em  cm | no border appears around an element’s content |
| \* borders can also have multiple values within a property, each value representing a side of the element’s “box” in this order: top-right-bottom-left! | |
| [Margin](https://www.w3schools.com/cssref/pr_margin.asp) | four invisible lines (the top, right, bottom, left – in that order) that, when used together, produce a box surrounding an element’s borders. Margins are what determines the amount of space between elements | margin  margin-bottom  \*margins can also have multiple values within a property, each value representing a side of the element’s “box” in this order: top-right-bottom-left! | {margin: 5px;}  or  {margin-top: 10px;}  or  {margin: 5px 2px 5 px 2 px;} | px  pt  cm  em | zero spacing |
| [Padding](https://www.w3schools.com/css/css_padding.asp) | four invisible lines (the top, right, bottom, left – in that order) that, when used together, produce a box surrounding an element’s content. Margins are what determines the amount of space between an element and its borders | padding  padding-left  \*padding can also have multiple values within a property, each value representing a side of the element’s “box” in this order: top-right-bottom-left! | {padding: 5px;}  or  {padding-top: 10px;}  or  {padding: 5px 2px 5 px 2 px;} | px  pt  cm  em | zero spacing |

\*\*\*Height: Since browsers only calculate a page’s display width, not its height, the % unit of measurement does not work in most browsers. There is a workaround for this, but sometimes it can produce some unexpected results… so it’s easier to just get by without using % units. The workaround – Add the following code to your CSS:

* html, body {height:100%}

Note: to see your changes, you will have to use Dreamweaver’s “live” view mode, or view your .html doc in a web browser

***Formatting Objects PDF***

Follow along with the “formatting\_objects.pdf” instructions provided in the Shared drive (Hammond > Handout > Web Design > Formatting Objects). Read through each of the sections contained within the “formatting\_objects.pdf” document, and make changes to the appropriate html document in Dreamweaver as you read. Once you’re done making changes, play around with the property values to gain a better understanding of how each works!

**The Doing:**

***Code Academy Activity –*** [***Selecting HTML Elements & Review***](https://www.codecademy.com/en/courses/web-beginner-en-TlhFi/3/1?curriculum_id=50579fb998b470000202dc8b)

Activity Instructions: Visit the Code Academy website by clicking the hyperlink above. Complete Lessons 19-21 (Selecting HTML Elements) and 22-26 (Review)

***Code Academy Activity –*** [***Design a Button for Your Website***](https://www.codecademy.com/courses/web-beginner-en-UuBLw/0/1?curriculum_id=50579fb998b470000202dc8b)

Activity Instructions: Visit the Code Academy website by clicking the hyperlink above. Complete Lessons 1-6 (Coding in Style)

***Comprehension Question:***

* What is meant by the term “object formatting”?
* What are the three most common units of measurement for object formatting styles?
* What are some properties (at least 3) you can apply to your page’s background?
* What formatting property sometimes has unexpected results when you change it? How can you work around this issue?
* What is the name of the model that the border, margin, and padding elements make up? In what order do they appear, from the inside (closest to the content) out?
* Is the border property invisible? The margin? The padding?
* What is unique about the way the values can be written for the border, margin, and padding properties?
* What are some (at least 3) different styles that can be applied to the border property?