# **Web Color Primer**

### **Hexadecimal Colors**

- HTML does not use color models like RGB or CMYK to define colors.
- HTML uses the **hexadecimal** format to define color values.
  - Hexadecimal colors use six characters to represent a color.
  - Only the characters 0-9, A-F are used.
  - Letters can be either upper or lower case, but upper case is more common.
  - In HTML, the color value is generally preceded with a pound-sign (#).
- Examples:

Hexadecimal	Plain-Language	RGB	Web-safe?
#000000	Black	000	Yes
#FFFFF	White	255 255 255	Yes
#0000FF	Blue	0 0 255	Yes
#003366	none	0 51 102	Yes
#FF4500	OrangeRed	255 65 0	No
#176D0F	none	23 109 15	No

• The following HTML example sets the background color, the default text color, and the colors of links, visited links and active links:

```
<body bgcolor="#FFFFF text="#000000" link="#330066"
vlink="#CC0000" alink="#CC0000">
```

- Most design applications now support hexadecimal colors.
- You can also use plain-language to specify a color (Black, Blue, etc.), but there are only a handful of colors with names assigned to them. Unless you are specifying black or white, it's best to use hexadecimal values.

#### Web-Safe Colors

- What are web-safe colors?
  - Web-safe colors do not dither on computer capable of displaying only 256 colors.
  - All browsers support the web-safe color palette.
- Why have web-safe colors?
  - Unlike print, we don't have full control over the presentation medium.
  - Many older computers only support 256 colors.
  - Netscape developed the web-safe palette because it wanted a color palette that they knew was available on every computer, regardless of operating system and video card.
- Why 216 and not 256?
  - The missing 40 colors are for either reserved for operating system use or vary significantly across platforms.
- How to identify web-safe colors
  - All web-safe colors are formatted in the same manner consisting of three twocharacter pairs.
  - Web-safe colors use only 00, 33, 66, 99, CC, FF as their base-pairs.
- Example web-safe colors:

#336699	#99FF00	#006600
#003366	#6699CC	#FF33CC

- When to use web-safe colors
  - Primary navigation elements
  - Large areas of a solid color
  - Background colors for pages and table cells
- When not to use web-safe colors
  - Photographs
  - When you absolutely need a particular color
- However... there is some debate in the web design community as to whether web-safe colors are still relevant. Some advocate their continued use, while others feel they are no longer necessary.
  - Read more: <u>http://hotwired.lycos.com/webmonkey/00/37/index2a.html</u>

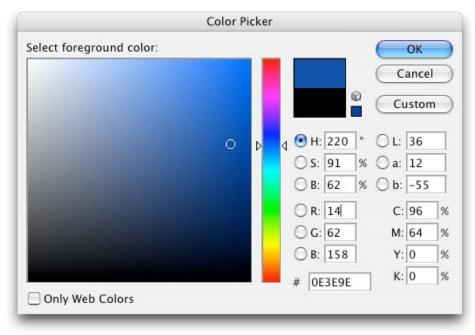
## Web-Safe Color Chart

- o From <u>http://www.lynda.com/hexh.html</u>
- Color chart is also available on the course Web site under Good Stuff.

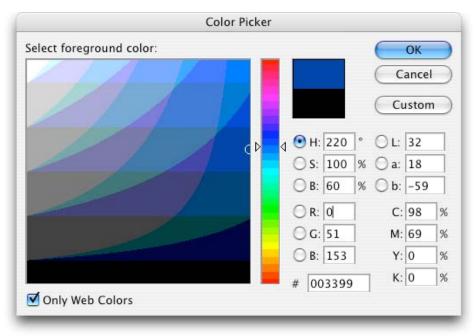
990033	FF3366	CC0033	FF0033	FF99999	CC3366	FFCCFF	CC6699	993366	660033	CC3399	FF99CC	FF66CC	FF99FF	FF6699	CC0066
R: 153	R: 255	R: 204	R: 255	R: 255	R: 204	R: 255	R: 204	R: 153	R: 102	R: 204	R: 255	R: 255	R: 255	R: 255	R: 204
G: 000	G: 051	G: 000	G: 000	G: 153	G: 051	G: 204	G: 051	G: 051	G: 000	G: 051	G: 153	G: 102	G: 153	G: 102	G: 000
B: 051	B: 102	B: 051	B: 051	B: 153	B: 102	B: 255	B: 153	B: 102	B: 051	B: 153	B: 204	B: 204	B: 255	B: 153	B: 102
FF0066	FF3399	FF0099	FF33CC	FF00CC	FF66FF	FF33FF	FF00FF	CC0099	990066	CC66CC	CC33CC	CC99FF	CC66FF	CC33FF	993399
R: 255	R: 255	R: 255	R: 255	R: 204	R: 153	R: 204	R: 204	R: 204	R: 204	R: 204	R: 153				
G: 000	G: 051	G: 000	G: 051	G: 000	G: 102	G: 051	G: 000	G: 000	G: 000	G: 102	G: 051	G: 153	G: 102	G: 051	G: 051
B: 102	B: 153	B: 153	B: 204	B: 204	B: 255	B: 255	B: 255	B: 153	B: 102	B: 204	B: 204	B: 255	B: 255	B: 255	B: 153
CC00CC	CCOOFF	9900CC	990099	CC99CC	996699	663366	660099	9933CC	660066	9900FF	9933FF	9966CC	330033	663399	6633CC
R: 204	R: 204	R: 153	R: 153	R: 204	R: 153	R: 102	R: 102	R: 153	R: 102	R: 153	R: 153	R: 153	R: 051	R: 102	R: 102
G: 000	G: 000	G: 000	G: 000	G: 153	G: 102	G: 051	G: 000	G: 051	G: 000	G: 000	G: 051	G: 102	G: 000	G: 051	G: 051
B: 204	B: 255	B: 204	B: 153	B: 204	B: 153	B: 102	B: 153	B: 204	B: 102	B: 255	B: 255	B: 204	B: 051	B: 153	B: 204
6600CC	9966FF	330066	6600FF	6633FF	CCCCFF	9999FF	99999CC	6666CC	6666FF	666699	333366	333399	330099	3300CC	3300FF
R: 102	R: 153	R: 051	R: 102	R: 102	R: 204	R: 153	R: 153	R: 102	R: 102	R: 102	R: 051	R: 051	R: 051	R: 051	R: 051
G: 000	G: 102	G: 000	G: 000	G: 051	G: 204	G: 153	G: 153	G: 102	G: 102	G: 102	G: 051	G: 051	G: 000	G: 000	G: 000
B: 204	B: 255	B: 102	B: 255	B: 255	B: 255	B: 255	B: 204	B: 204	B: 255	B: 153	B: 102	B: 153	B: 153	B: 204	B: 255
3333FF	3333CC	0066FF	0033FF	3366FF	3366CC	000066	000033	0000FF	000099	0033CC	00000CC	336699	0066CC	99CCFF	6699FF
R: 051	R: 051	R: 000	R: 000	R: 051	R: 051	R: 000	R: 000	R: 000	R: 000	R: 000	R: 000	R: 051	R: 000	R: 153	R: 102
G: 051	G: 051	G: 102	G: 051	G: 102	G: 102	G: 000	G: 000	G: 000	G: 000	G: 051	G: 000	G: 102	G: 102	G: 204	G: 153
B: 255	B: 204	B: 255	B: 255	B: 255	B: 204	B: 102	B: 051	B: 255	B: 153	B: 204	B: 204	B: 153	B: 204	B: 255	B: 255
003366	6699CC	006699	3399CC	0099CC	66CCFF	3399FF	003399	0099FF	33CCFF	00CCFF	99FFFF	66FFFF	33FFFF	00FFFF	00CCCC
R: 000	R: 102	R: 000	R: 051	R: 000	R: 102	R: 051	R: 000	R: 000	R: 051	R: 000	R: 153	R: 102	R: 051	R: 000	R: 000
G: 051	G: 153	G: 102	G: 153	G: 153	G: 204	G: 153	G: 051	G: 153	G: 204	G: 204	G: 255	G: 255	G: 255	G: 255	G: 204
B: 102	B: 204	B: 153	B: 204	B: 204	B: 255	B: 255	B: 153	B: 255	B: 255	B: 255	B: 255	B: 255	B: 255	B: 255	B: 204
009999	669999	99CCCC	CCFFFF	33CCCC	66CCCC	339999	336666	006666	003333	00FFCC	33FFCC	33CC99	00CC99	66FFCC	99FFCC
R: 000	R: 102	R: 153	R: 204	R: 051	R: 102	R: 051	R: 051	R: 000	R: 000	R: 000	R: 051	R: 051	R: 000	R: 102	R: 153
G: 153	G: 153	G: 204	G: 255	G: 204	G: 204	G: 153	G: 102	G: 102	G: 051	G: 255	G: 255	G: 204	G: 204	G: 255	G: 255
B: 153	B: 153	B: 204	B: 255	B: 204	B: 204	B: 153	B: 102	B: 102	B: 051	B: 204	B: 204	B: 153	B: 153	B: 204	B: 204
00FF99	339966	006633	336633	669966	66CC66	99FF99	66FF66	339933	99CC99	66FF99	33FF99	33CC66	00CC66	66CC99	009966
R: 000	R: 051	R: 000	R: 051	R: 102	R: 102	R: 153	R: 102	R: 051	R: 153	R: 102	R: 051	R: 051	R: 000	R: 102	R: 000
G: 255	G: 153	G: 102	G: 102	G: 153	G: 204	G: 255	G: 255	G: 153	G: 204	G: 255	G: 255	G: 204	G: 204	G: 204	G: 153
B: 153	B: 102	B: 051	B: 051	B: 102	B: 102	B: 153	B: 102	B: 051	B: 153	B: 153	B: 153	B: 102	B: 102	B: 153	B: 102
009933	33FF66	00FF66	CCFFCC	CCFF99	99FF66	99FF33	00FF33	33FF33	00CC33	33CC33	66FF33	00FF00	66CC33	006600	003300
R: 000	R: 051	R: 000	R: 204	R: 204	R: 153	R: 153	R: 000	R: 051	R: 000	R: 051	R: 102	R: 000	R: 102	R: 000	R: 000
G: 153	G: 255	G: 255	G: 255	G: 255	G: 255	G: 255	G: 255	G: 255	G: 204	G: 204	G: 255	G: 255	G: 204	G: 102	G: 051
B: 051	B: 102	B: 102	B: 204	B: 153	B: 102	B: 051	B: 051	B: 051	B: 051	B: 051	B: 051	B: 000	B: 051	B: 000	B: 000
009900	33FF00	66FF00	99FF00	66CC00	00CC00	33CC00	339900	99CC66	669933	99CC33	336600	669900	99CC00	CCFF66	CCFF33
R: 000	R: 051	R: 102	R: 153	R: 102	R: 000	R: 051	R: 051	R: 153	R: 102	R: 153	R: 051	R: 102	R: 153	R: 204	R: 204
G: 153	G: 255	G: 255	G: 255	G: 204	G: 204	G: 204	G: 153	G: 204	G: 153	G: 204	G: 102	G: 153	G: 204	G: 255	G: 255
B: 000	B: 000	B: 000	B: 000	B: 102	B: 051	B: 051	B: 000	B: 000	B: 000	B: 102	B: 051				
CCFF00	999900	CCCC00	CCCC33	333300	666600	999933	CCCC66	666633	999966	CCCC99	FFFFCC	FFFF99	FFFF66	FFFF33	FFFF00
R: 204	R: 153	R: 204	R: 204	R: 051	R: 102	R: 153	R: 204	R: 102	R: 153	R: 204	R: 255	R: 255	R: 255	R: 255	R: 255
G: 255	G: 153	G: 204	G: 204	G: 051	G: 102	G: 153	G: 204	G: 102	G: 153	G: 204	G: 255	G: 255	G: 255	G: 255	G: 255
B: 000	B: 000	B: 000	B: 051	B: 000	B: 000	B: 051	B: 102	B: 051	B: 102	B: 153	B: 204	B: 153	B: 102	B: 051	B: 000
FFCC00	FFCC66	FFCC33	CC9933	996600	CC9900	FF9900	CC6600	993300	CC6633	663300	FF9966	FF6633	FF9933	FF6600	CC3300
R: 255	R: 255	R: 255	R: 204	R: 153	R: 204	R: 255	R: 204	R: 153	R: 204	R: 102	R: 255	R: 255	R: 255	R: 255	R: 204
G: 204	G: 204	G: 204	G: 153	G: 102	G: 153	G: 153	G: 102	G: 051	G: 102	G: 051	G: 153	G: 102	G: 153	G: 102	G: 051
B: 000	B: 102	B: 051	B: 051	B: 000	B: 000	B: 000	B: 000	B: 000	B: 051	B: 000	B: 102	B: 051	B: 051	B: 000	B: 000
996633	330000	663333	996666	CC99999	993333	CC6666	FFCCCC	FF3333	CC33333	FF66666	660000	990000	CC0000	FF0000	FF3300
R: 153	R: 051	R: 102	R: 153	R: 204	R: 153	R: 204	R: 255	R: 255	R: 204	R: 255	R: 102	R: 153	R: 204	R: 255	R: 255
G: 102	G: 000	G: 051	G: 102	G: 153	G: 051	G: 102	G: 204	G: 051	G: 051	G: 102	G: 000	G: 000	G: 000	G: 000	G: 051
B: 051	B: 000	B: 051	B: 102	B: 153	B: 051	B: 102	B: 204	B: 051	B: 051	B: 102	B: 000	B: 000	B: 000	B: 000	B: 000
CC9966 R: 204 G: 153 B: 102	FFCC99 R: 255 G: 204 B: 153	FFFFFF R: 255 G: 255 B: 255	CCCCCC R: 204 G: 204 B: 204	9999999 R: 153 G: 153 B: 153	666666 R: 102 G: 102 B: 102	333333 R: 053 G: 051 B: 051	000000 R: 000 G: 000 B: 000								

## **Obtaining Hexadecimal Colors in Photoshop and ImageReady**

- You can use Photoshop or ImageReady to obtain a color's hexadecimal value.
- Photoshop's Color Picker has a number of different ways to view a color's value, including hexadecimal, which is represented by the # sign at the bottom of the window.

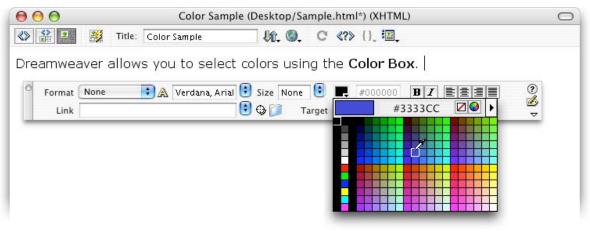


 You can force Photoshop and ImageReady to select only web-safe colors by clicking on the Only Web Colors button at the bottom-left corner of the window.

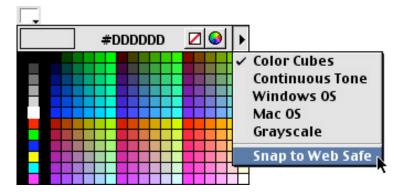


#### **Obtaining Hexadecimal Colors in Dreamweaver**

- You can also use Dreamweaver to obtain hexadecimal values.
- Dreamweaver uses what it calls Color Boxes (  $\square$  ). Throughout the program, these boxes allow for quick color selection.
- The Color Box uses the web safe color palette as its' primary palette.
  - You can select other color palettes by selecting the Color Box submenu in the top-right of the box (see example below).
- Example:
  - Selecting a text color using the Color Box in the Property Inspector:



- One nice feature of the Color Box Eyedropper is that you can select **any** color on screen, not just colors in the palette.
  - Simply move your cursor to anywhere on screen and click to select a color.
  - Dreamweaver gives you real-time feedback about a color beneath the eyedropper, including the hexadecimal number and a small sample swatch.
  - Be default, Dreamweaver only returns web safe colors, but you can change this by deselecting *Snap To Web Safe* in the Color Box submenu.



 You can also manually enter hexadecimal colors by using the text area next to each Color Box.