

Color Theory

September 22nd, 2008



What is Color Theory?

Premeditated use of color



Before we begin

Binary is a number system

Based on using only 1's and 0's (base 2)

In binary 14 looks like this 1110

Hexadecimal is a number system

Based on using 0 – F to represent 0 – 15

Hex is used to represent colors using 6 digits



What does it look like?

We denote hex by placing a pound sign (#) in front of the number.

Black = **#000000**

#333333

#666666

#999999

#CCCCCC

White = **#FFFFFF**

Dissecting a hex color

#FF0000



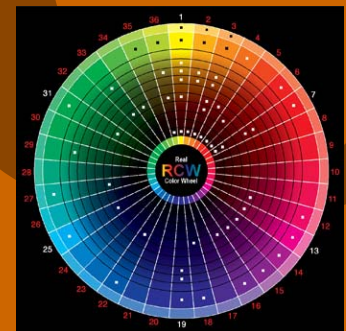
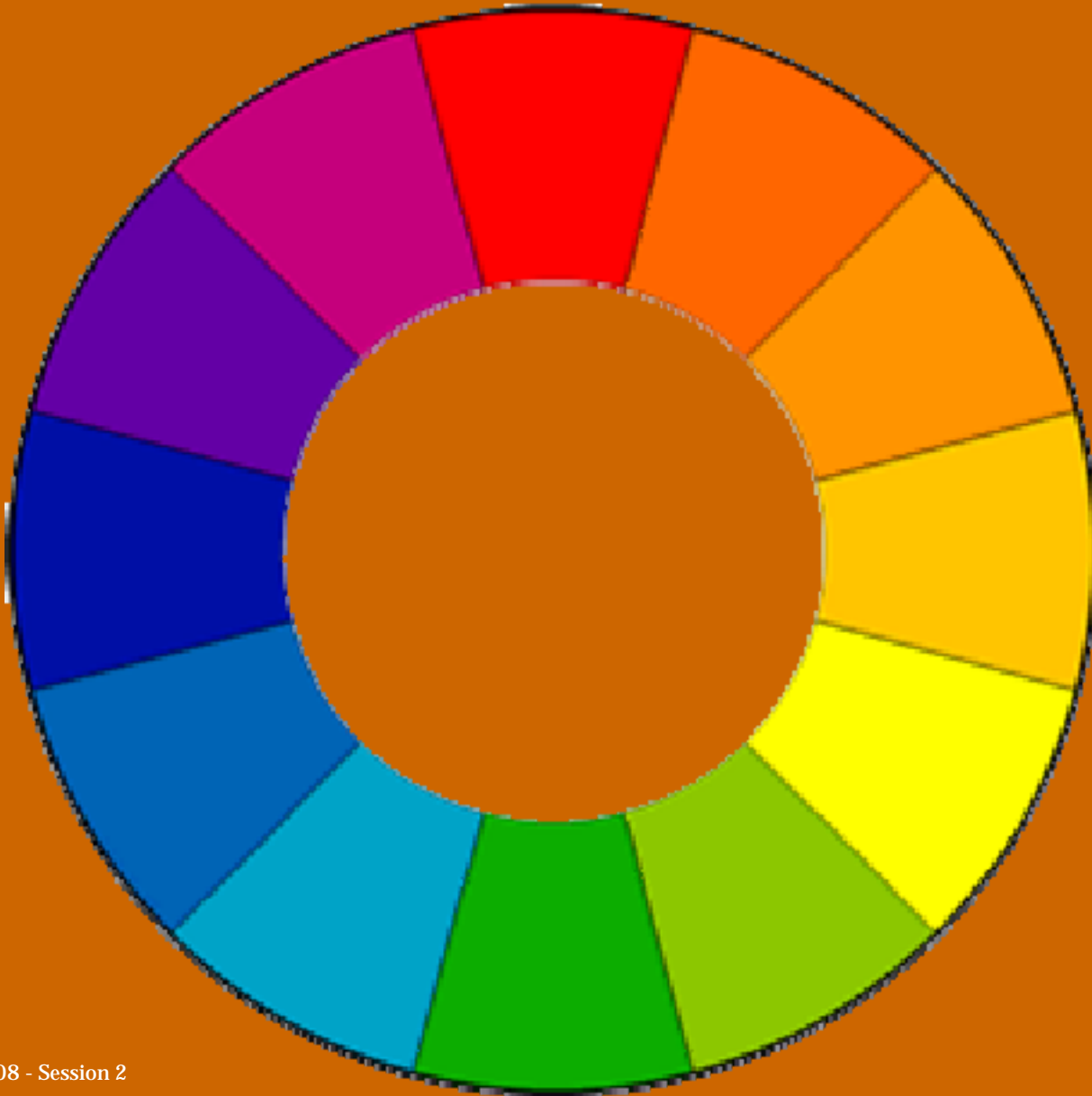
Red intensity

Green intensity

Blue intensity

Alternatively, you can specify the red (R), green (G), and blue (B) intensities directly

The Color Wheel



Why is it in a circle?

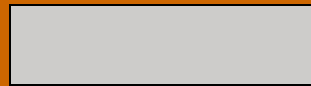
To show the relationships of the colors



Color Schemes are

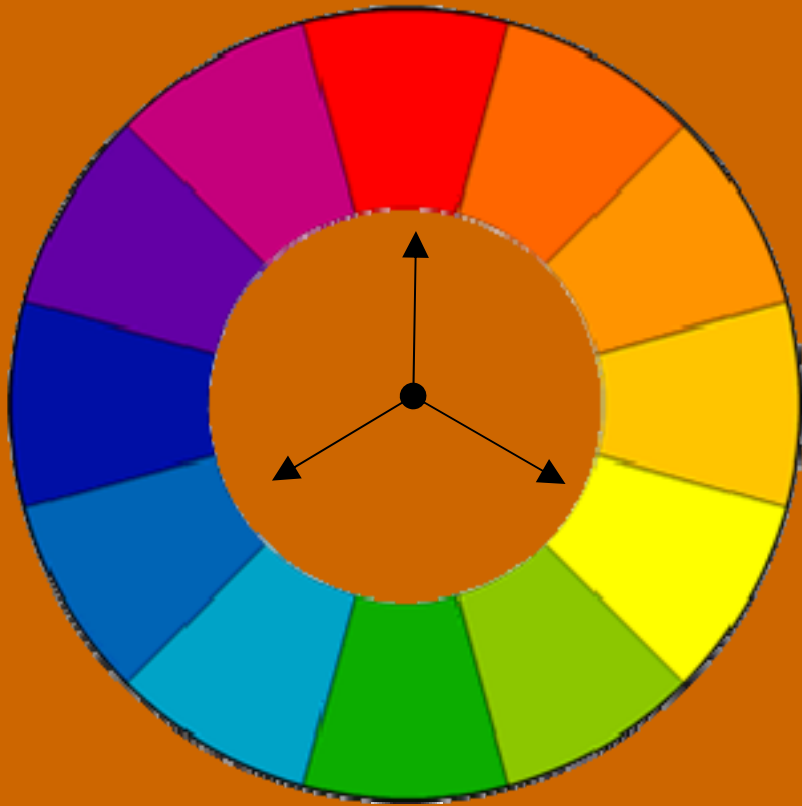
A collection of colors

We see colors together all the time



Defined color schemes

Primary Colors

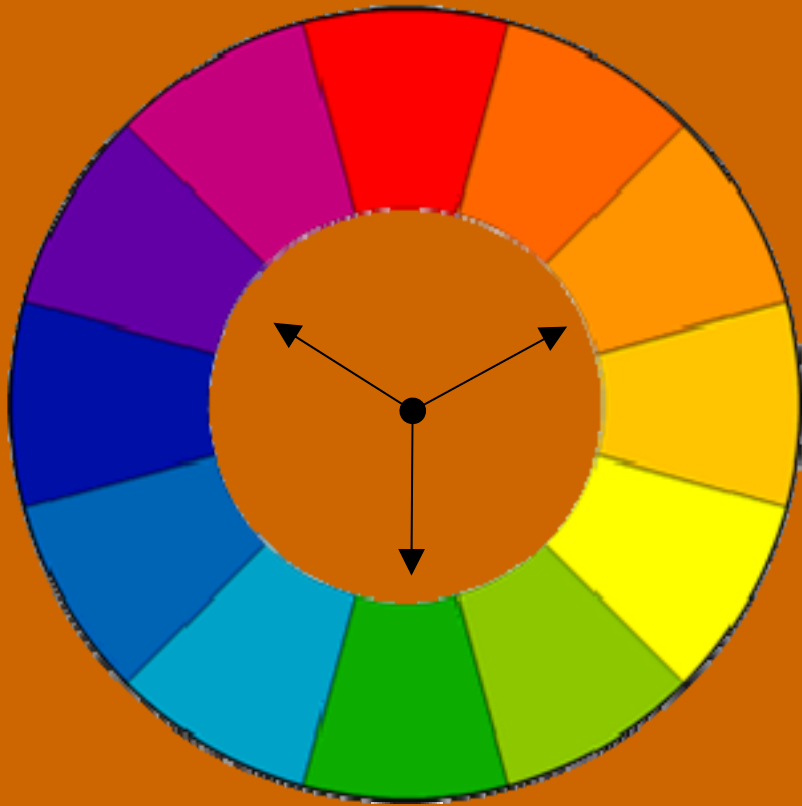


red,
blue,
yellow

The three colors that make every other color

Defined color schemes

Secondary Colors

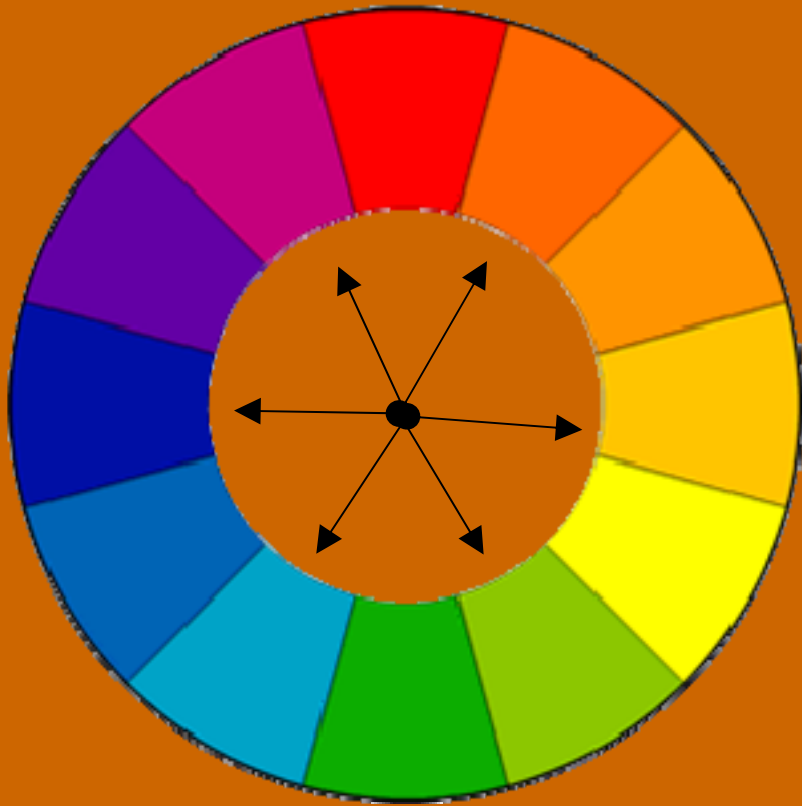


green,
purple,
orange

The first three colors made from red, blue, & yellow

Defined color schemes

Tertiary Colors

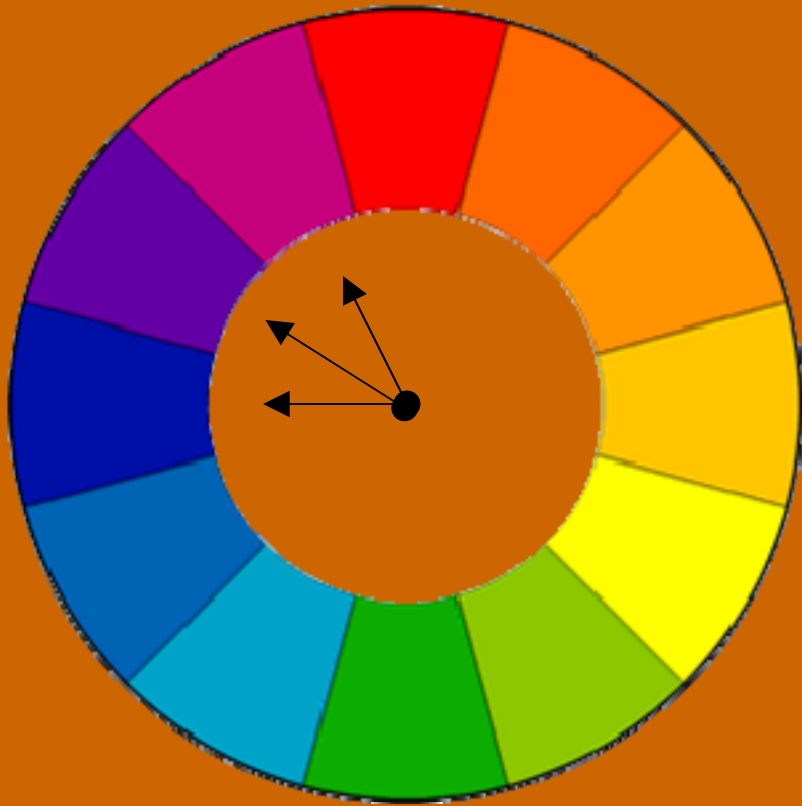


red-violet,
red-orange,
yellow-green,
yellow-orange,
etc

The mixture of one primary color and one secondary color

Defined color schemes

Analogous Colors



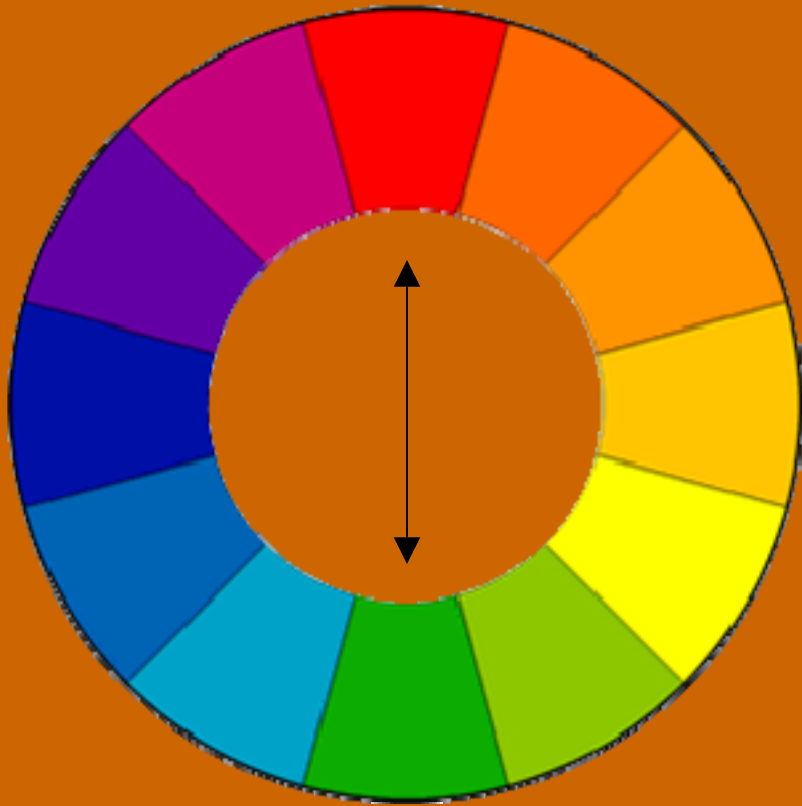
blue-violet,
purple,
red-violet

Colors adjacent to each other



Defined color schemes

Complimentary Colors

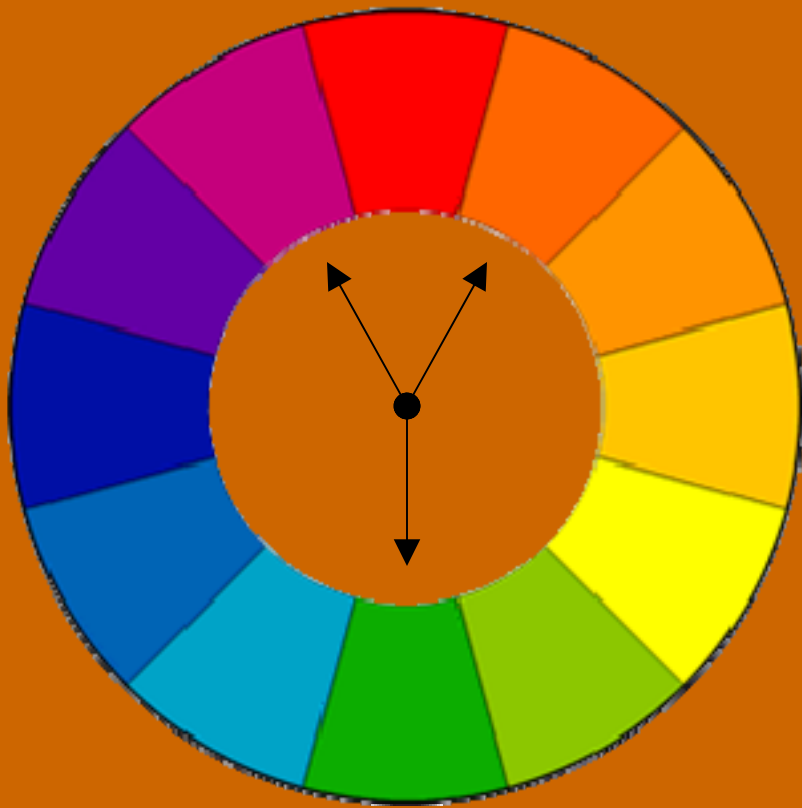


red,
green

Colors across from each other, opposites

Defined color schemes

Split-Complimentary Colors

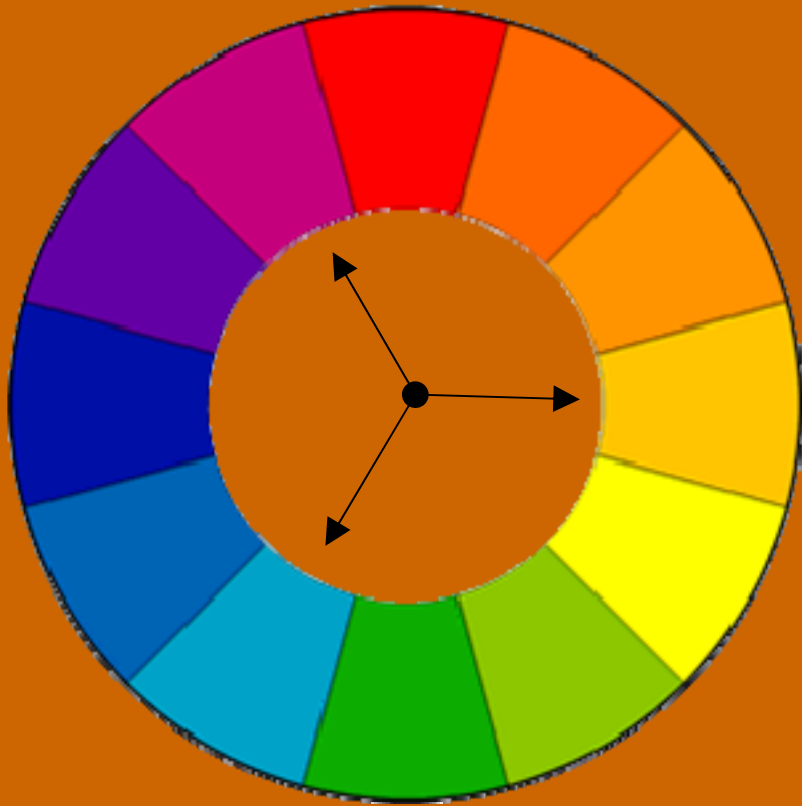


red-violet,
red-orange,
green

A color and the two colors on either side of its complement

Defined color schemes

Triadic Colors

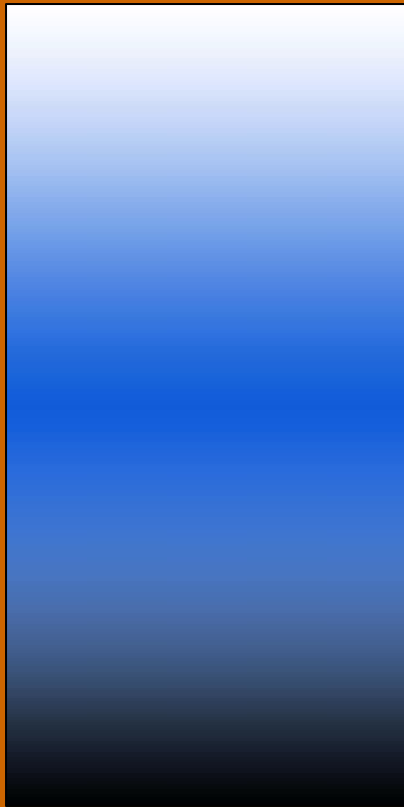


red-violet,
yellow-orange,
blue-green

3 colors evenly spaced from one another

Defined color schemes

Monochromatic



blue,
blue with white added (tint),
blue with black added (shade)

A single color and its tints and shades

What did we learn?

What other cues did we gather from those schemes?

How many colors?

1 - 4



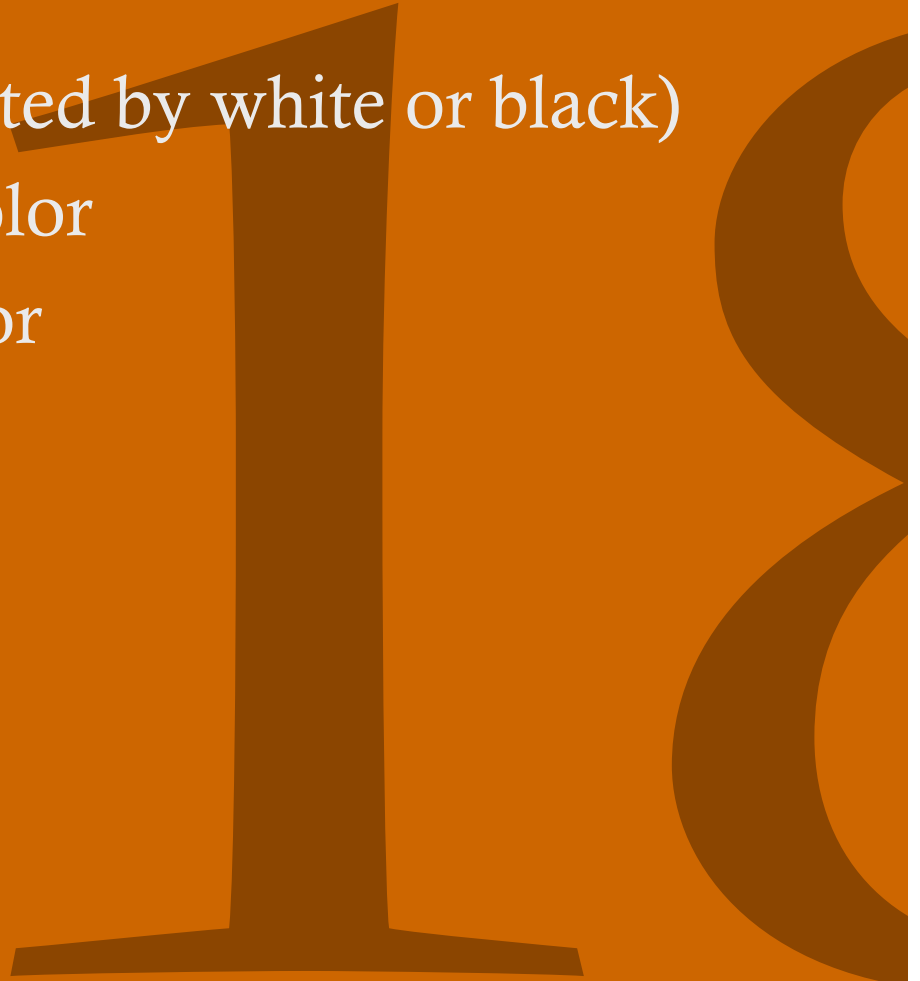
More terminology

Hue – color

Saturation – hue purity (tainted by white or black)

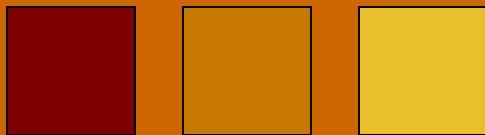
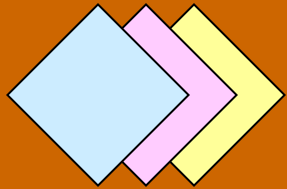
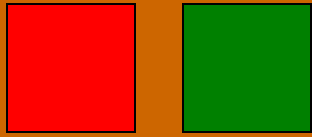
Shade – adding black to a color

Tint – adding white to a color



Color

Color is so strong it can evoke feelings



<http://www.color-wheel-pro.com/color-theory-basics.html>



Color meaning

What colors evoke hunger?

What colors evoke depression?

Happiness?

<http://dutchboy.com/colors/choose/meaning/meaning/>

Logo Fail

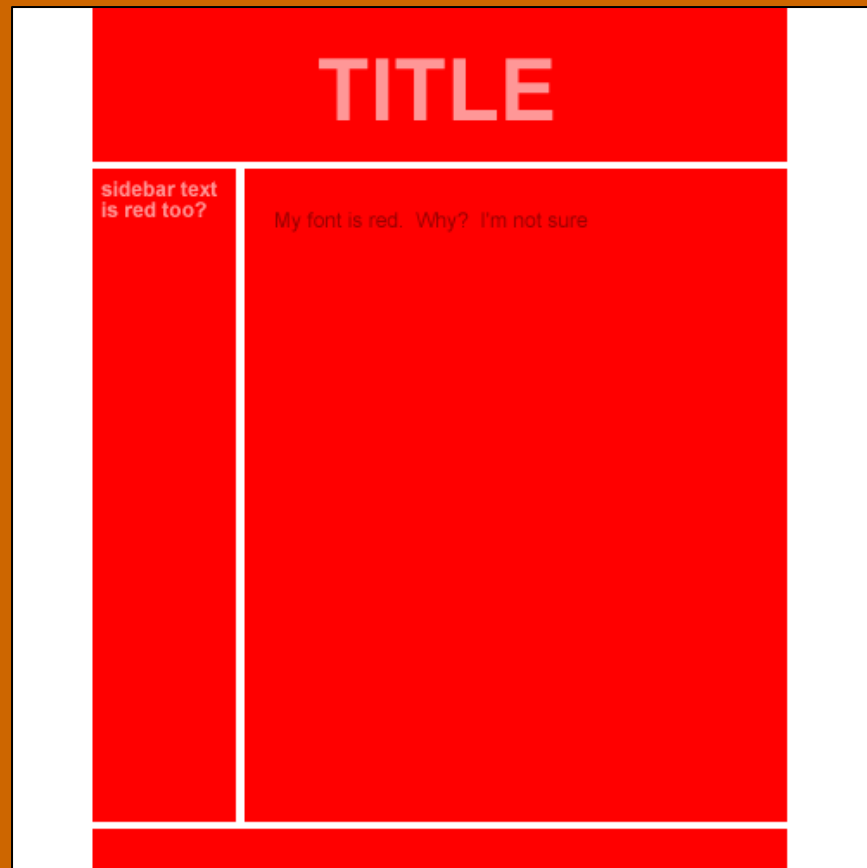


Logo Fail



A classic misunderstanding

Of color use on the web



But you said

To pick a color scheme

Why is there a problem?

- Readability (contrast check)
- Usability
- Accessibility

Website Develop Color Galleries

- <http://designshack.co.uk/>
- <http://www.cssclip.com/>

See Gimme, Gimme

For color links



