

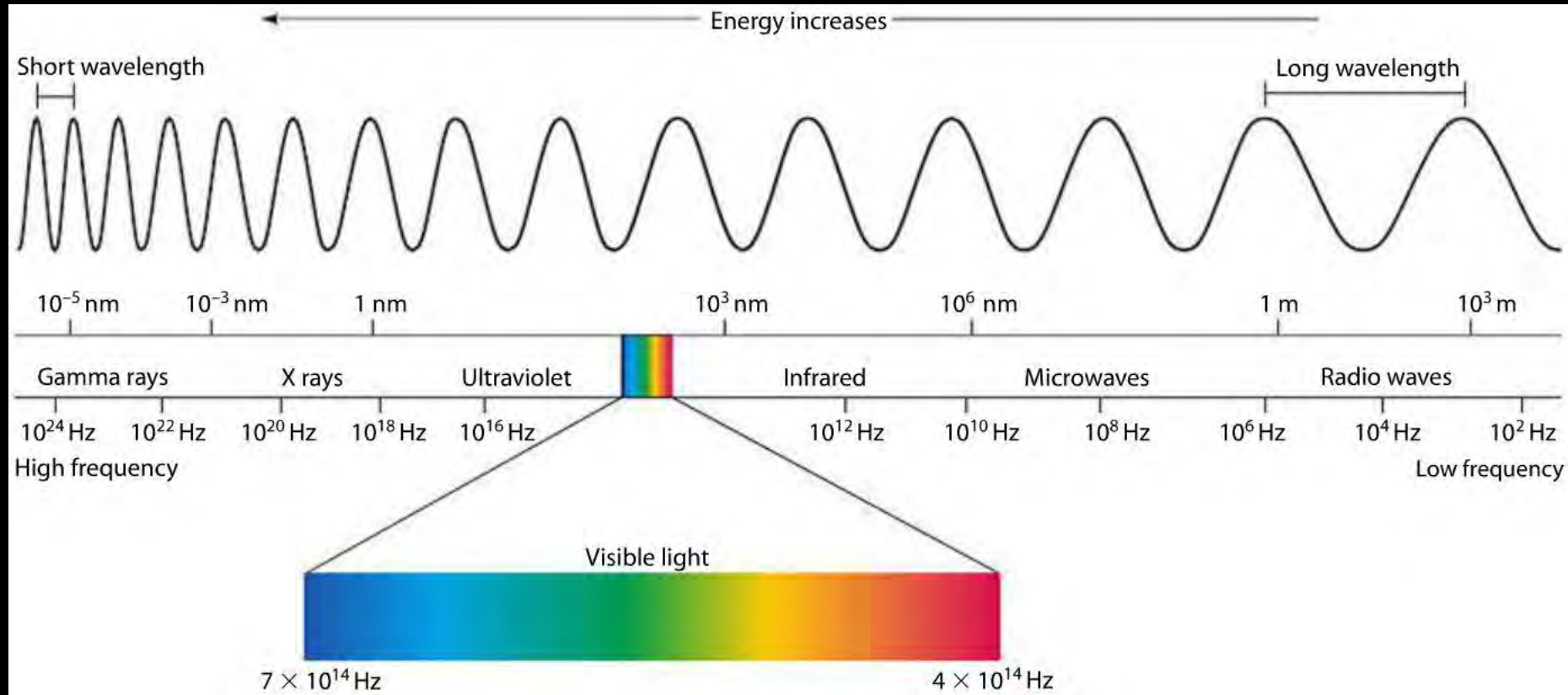
MassArt PCE - Intro to Digital Photo - Fall 2020 - Morrison

Class 5: 10/8/20

Color I:

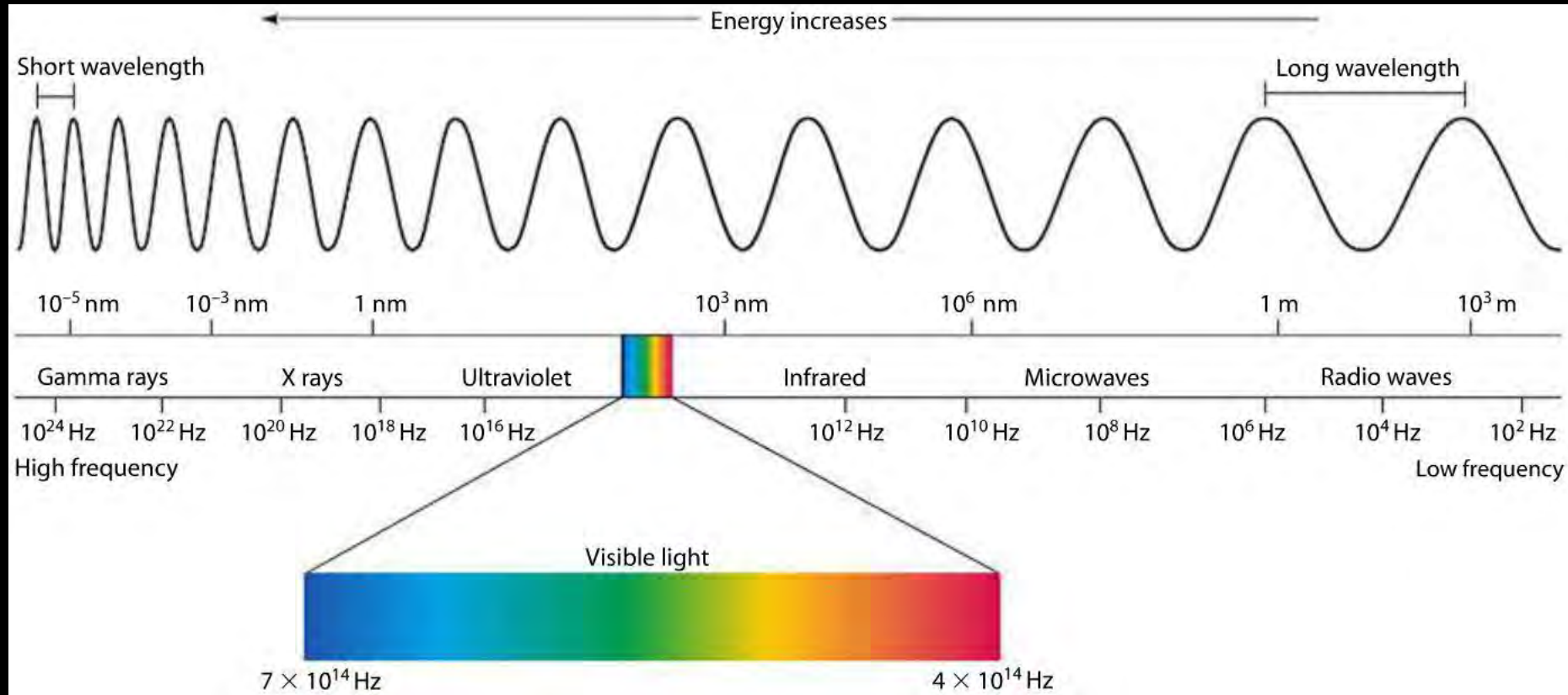
The Color of Light

The Color of Light



Light is the visible portion of the Electromagnetic Spectrum

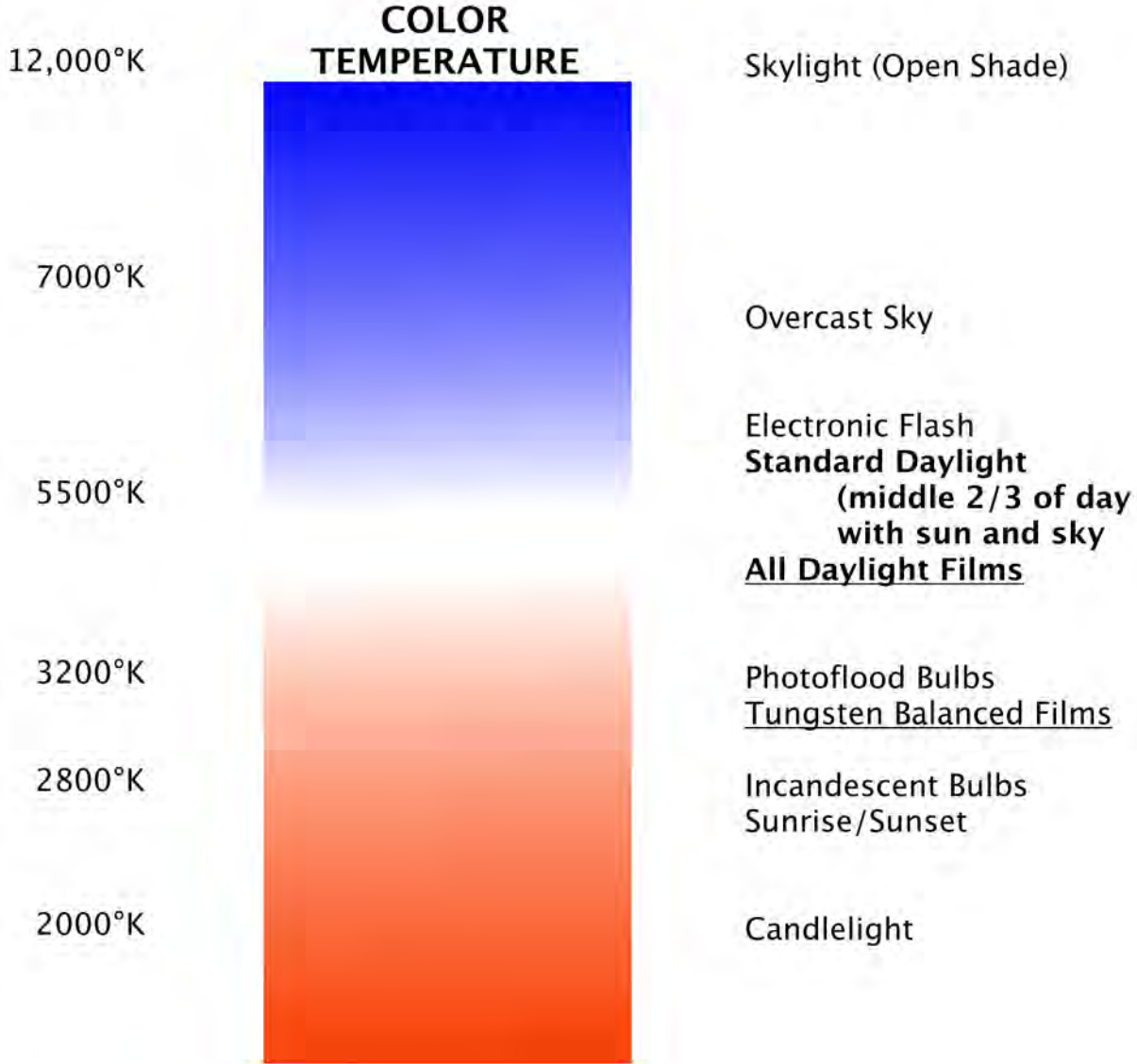
The Color of Light



Light is the visible portion of the Electromagnetic Spectrum

When all of the colors of the visible spectrum are *mixed in relatively equal proportions*, that is **WHITE LIGHT**.

COLOR TEMPERATURE



Non-Continuous Spectrum Emitters (Non-White Light)



Sodium and Mercury Vapor Street lamps

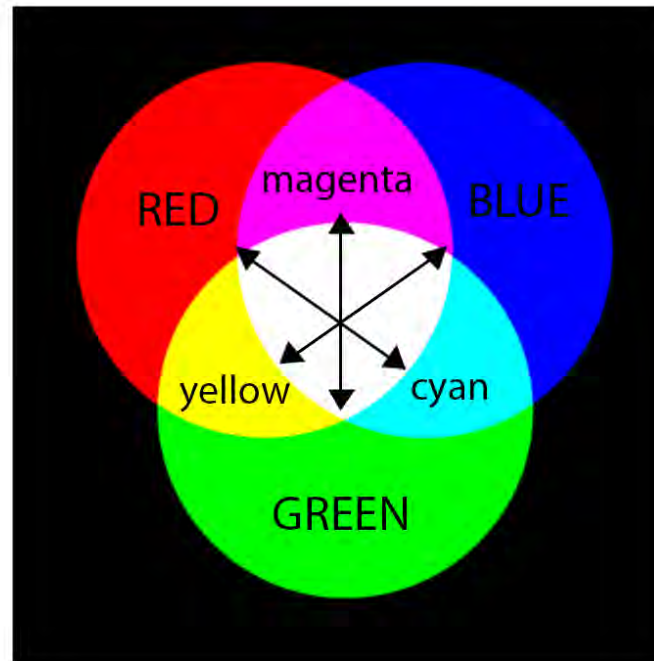


Green Fluorescents

Non-continuous spectrum emitters are NOT white light,
as they are missing one or more wavelength(s) of the visible spectrum

The Color Wheel of Light

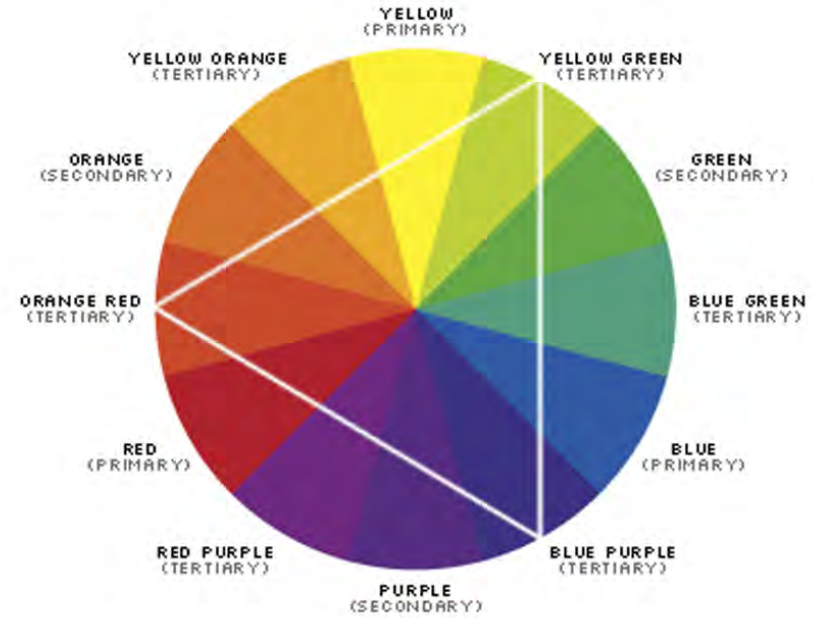
Each color here is pointing at its opposite, or complement.
The circles--RED, GREEN, and BLUE---are the primary colors of light.
The points of intersection show the combinations of two primary colors.
All the colors of light cobined together---as indicated in the center---make WHITE LIGHT.



Light vs. Pigment



LIGHT

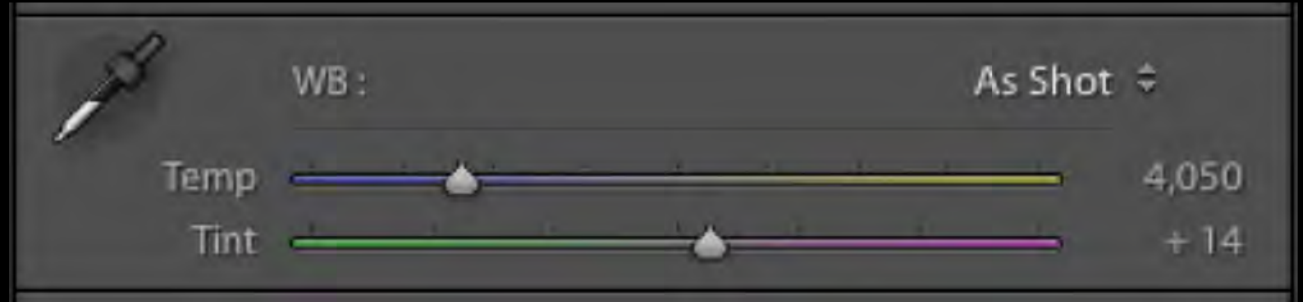


PIGMENT

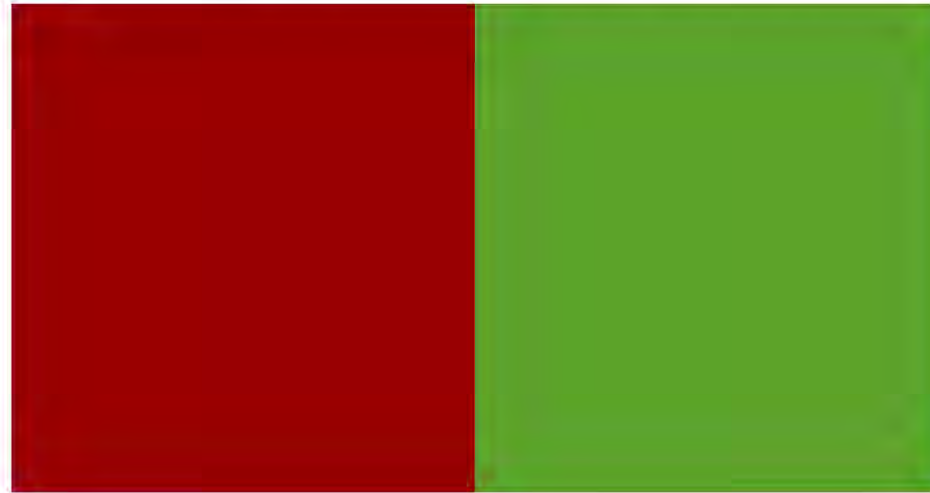
Color Temperature and Tint



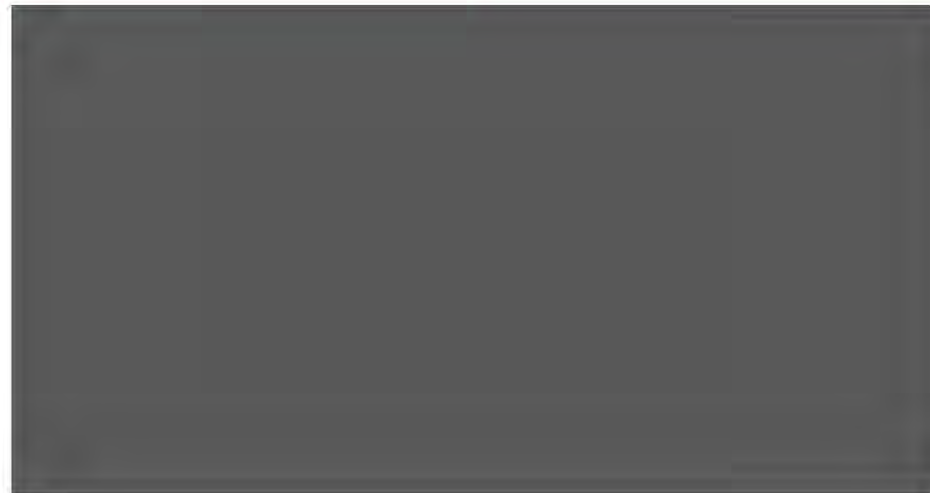
LIGHT



Color Contrast vs. Tonal Contrast

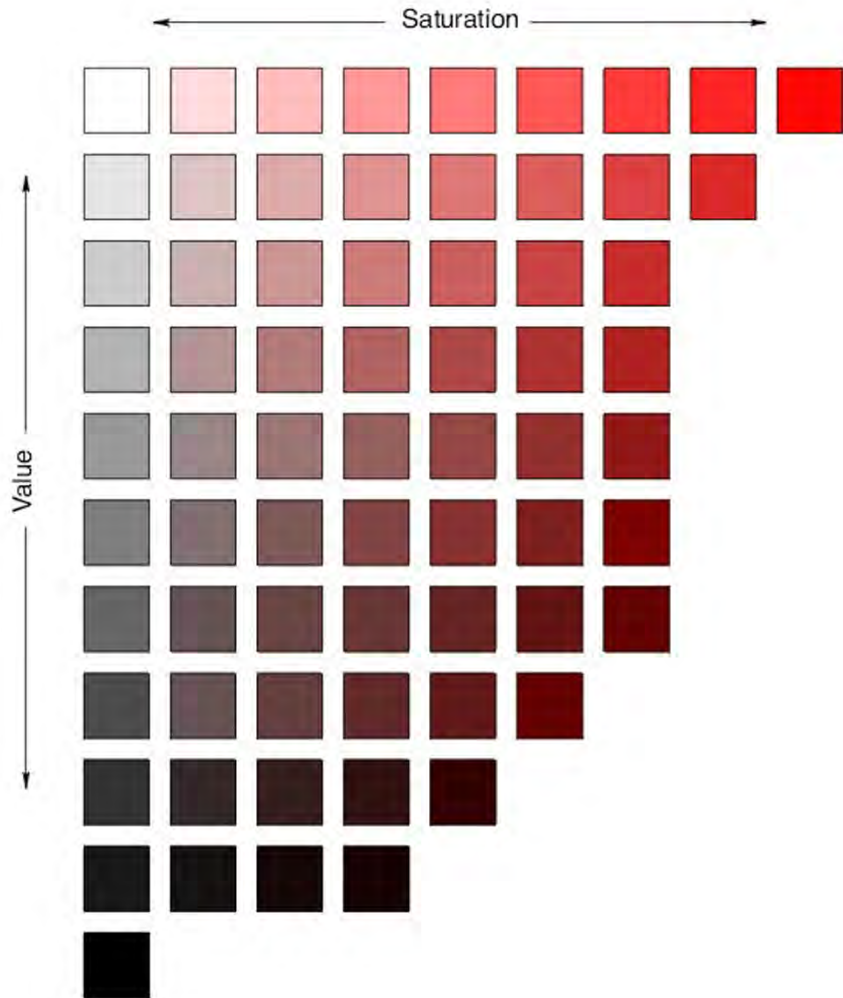


COLOR



GRAYSCALE

HSL



HUE

The name of the color

SATURATION

The purity of the color
(NO saturation = B&W)

LUMINANCE (Value)

The lightness or darkness of the color, on a scale from black to white
(Think SONE SYSTEM, but in color)

HSL (Hue, Saturation, Luminance in Lightroom)

The screenshot displays the Adobe Lightroom interface, specifically the HSL/Color panel. At the top, a histogram shows the distribution of colors in the image, with a prominent peak in the blue and yellow regions. Below the histogram, technical camera data is shown: ISO 100, 50 mm, f/5.6, and 0.6 sec. A checkbox labeled "Original Photo" is present. The interface includes navigation icons for grid, compare, web, and zoom, along with a crop tool and a slider. The "Basic" panel is selected, and the "HSL/Color" panel is expanded. The "Saturation" tab is active, showing sliders for Red, Orange, Yellow, Green, Aqua, Blue, Purple, and Magenta, all set to 0. The "Split Toning" panel is partially visible at the bottom.

Histogram ▼

ISO 100 50 mm f/5.6 0.6 sec

Original Photo

Basic ◀







Tone Curve ◀

HSL/Color ▼

	Hue	Saturation	Luminance	All
⊙ Saturation				
Red		0		0
Orange		0		0
Yellow		0		0
Green		0		0
Aqua		0		0
Blue		0		0
Purple		0		0
Magenta		0		0

Split Toning ◀

PSYCHOLOGICAL IMPLICATIONS OF COLOR: (Euro-American Societies)

HUE	POSITIVE	NEGATIVE
	* BLOOD , passion, energy, eroticism	* BLOOD , anger, aggression
	* HUMAN FLESH , warmth, (Hearth fire), accessibility	* HUMAN FLESH , weakness, lack of discrimination
	SUNSHINE , energy, happiness	Overwhelming energy
	Life, nature, restfulness (Foliage, green forests)	Toxicity, Artificiality decay (fungus, mold)
	“Coolness” (elegance) spirituality, sky	“Coolness” (distance) sadness, depression (“blues”)
	Fantasy, playfulness, dream states (also royalty)	Madness, Nightmares