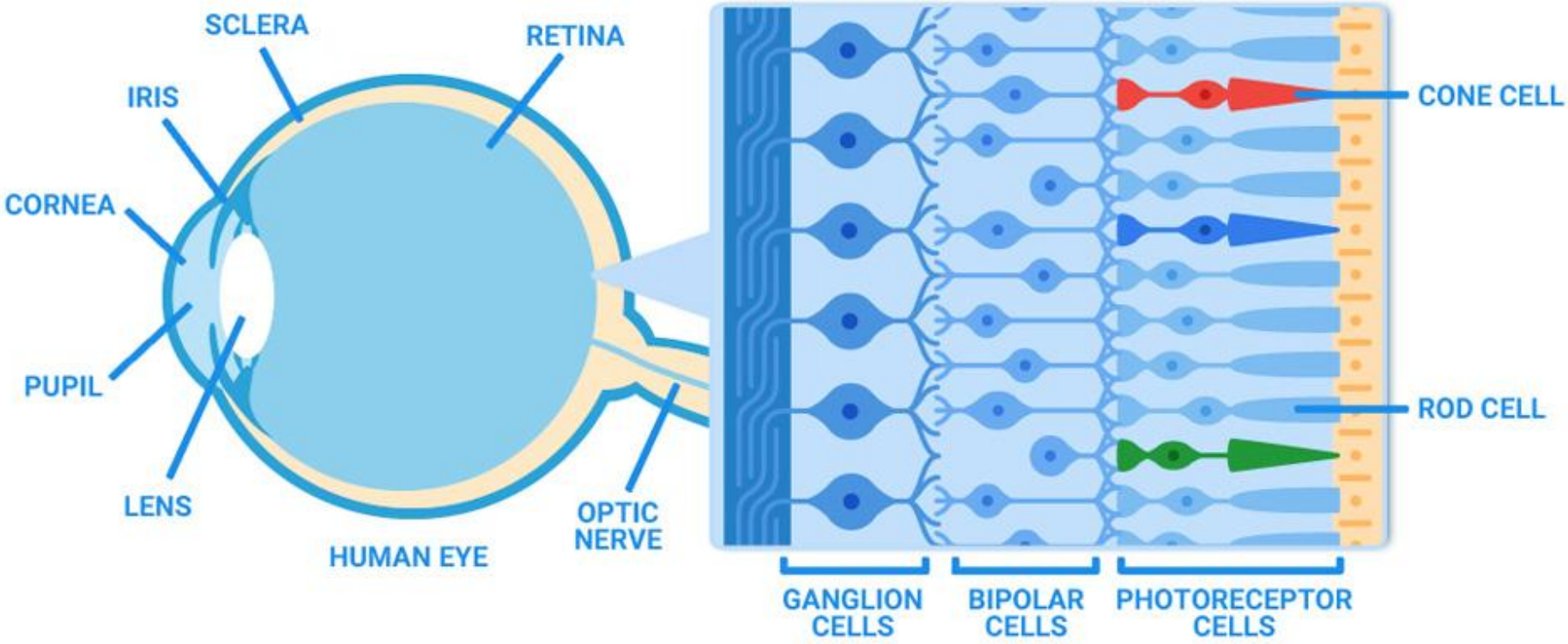
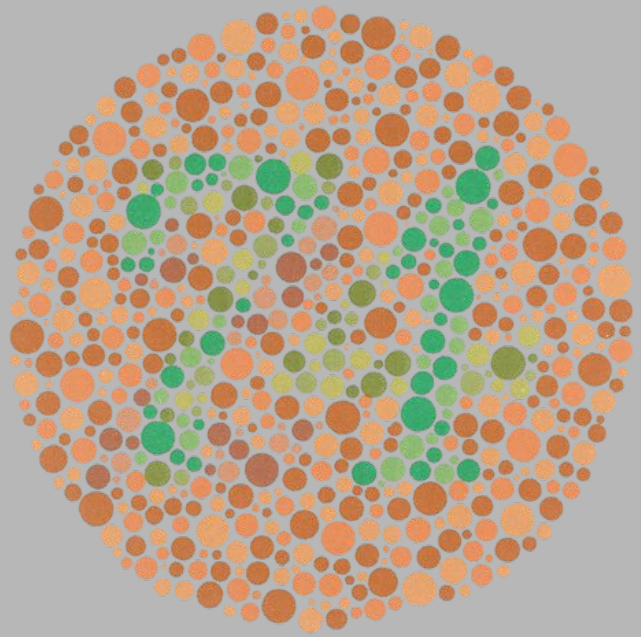
Color

bit.ly/2017cyc


SCLERA
RETINA
IRIS
CORNEA
PUPIL
LENS
HUMAN EYE
OPTIC NERVE
CONE CELL
ROD CELL
GANGLION CELLS
BIPOLAR CELLS
PHOTORECEPTOR CELLS

2.7 Million Color Blind People

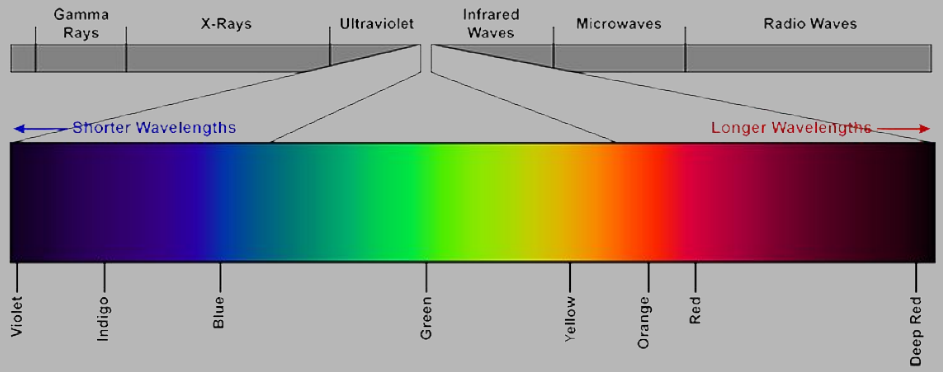


Take the Test http://enchroma.com/test-150401.2/#&ui-state=diaog

Take the Test

http://enchroma.com/test/instructions/

Super Sight



Dichromat

Almost all animals

Have 2 types of cones

Trichromat

Humans

Have 3 types of cones

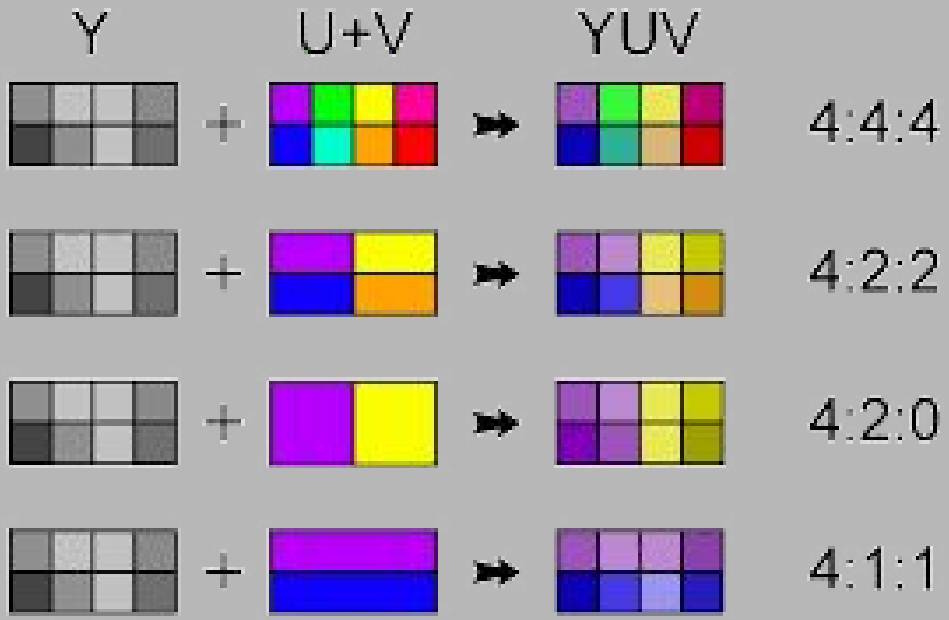
Tetrachromat

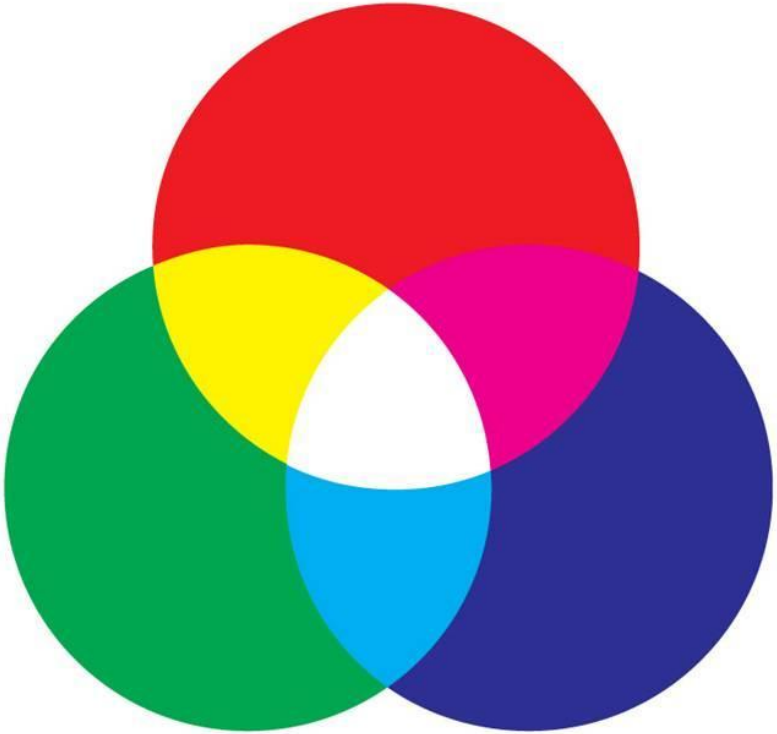
Some humans, Goldfish, zebra fish

Have 4 types of cones

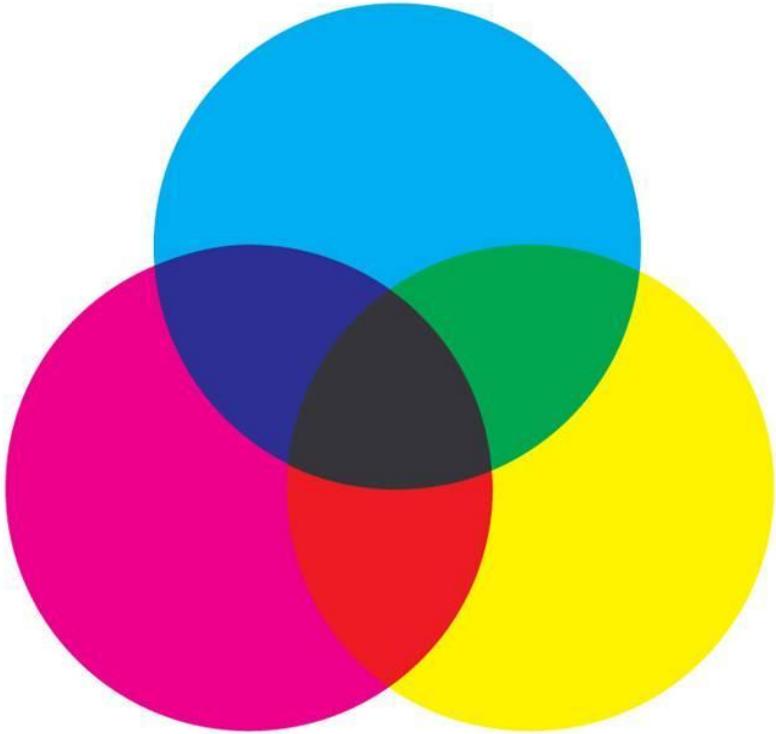
Super Sight http://discovermagazine.com/2012/jul-aug/06-humans-with-super-human-vision

Chroma Subsampling in Compression





Additive Colors



Subtractive Colors

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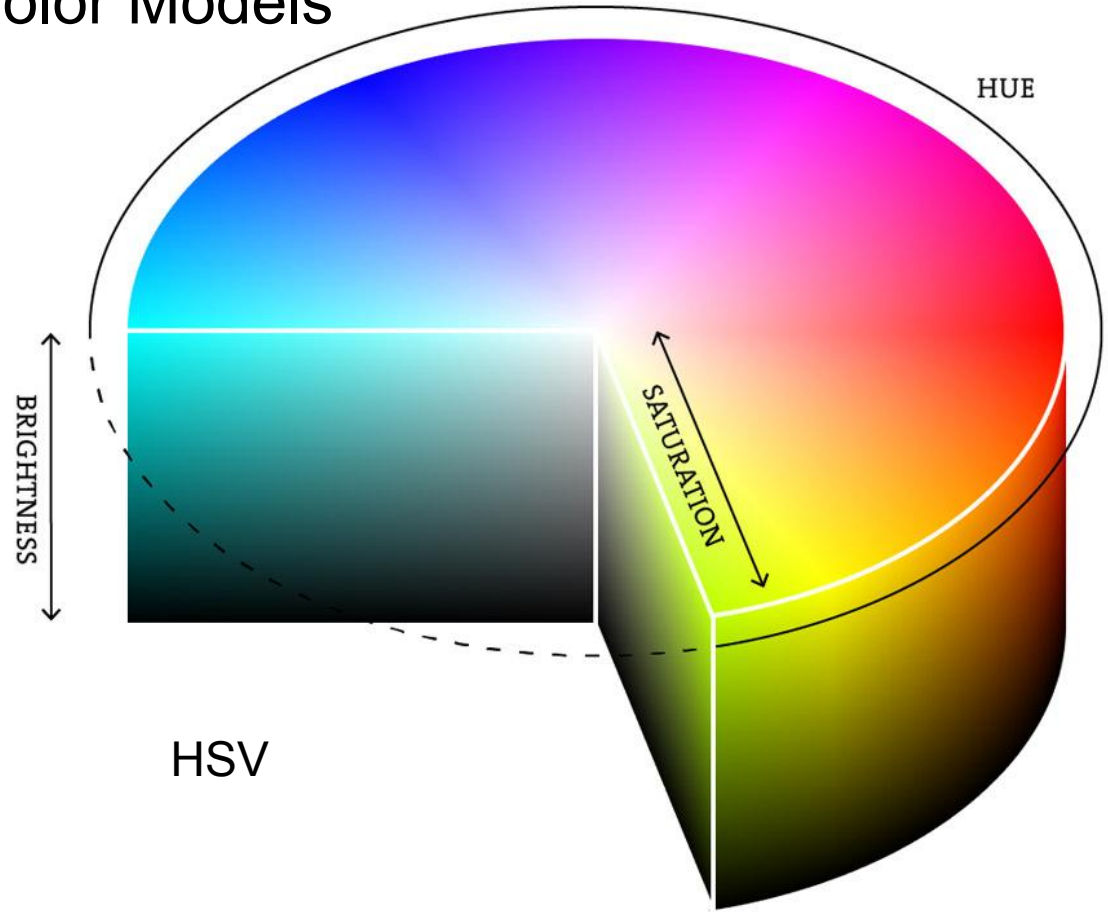
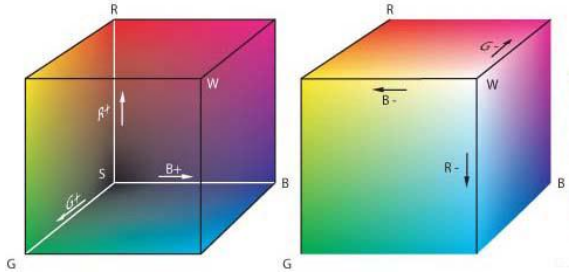
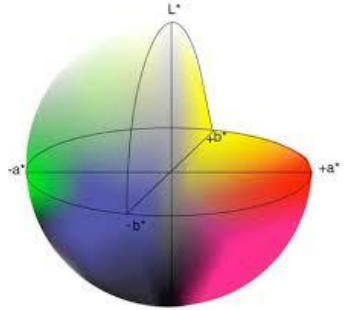
Color Models



HSV

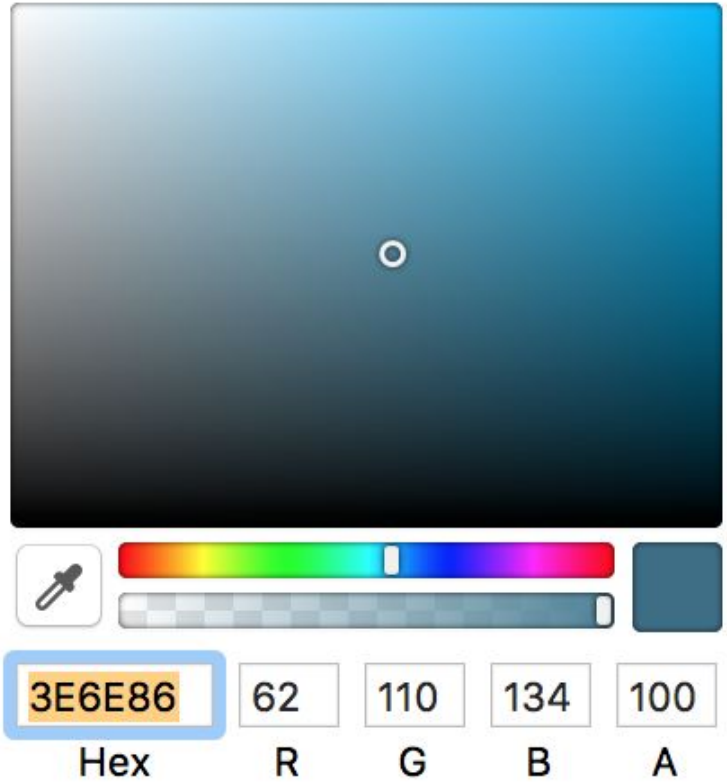


RGB

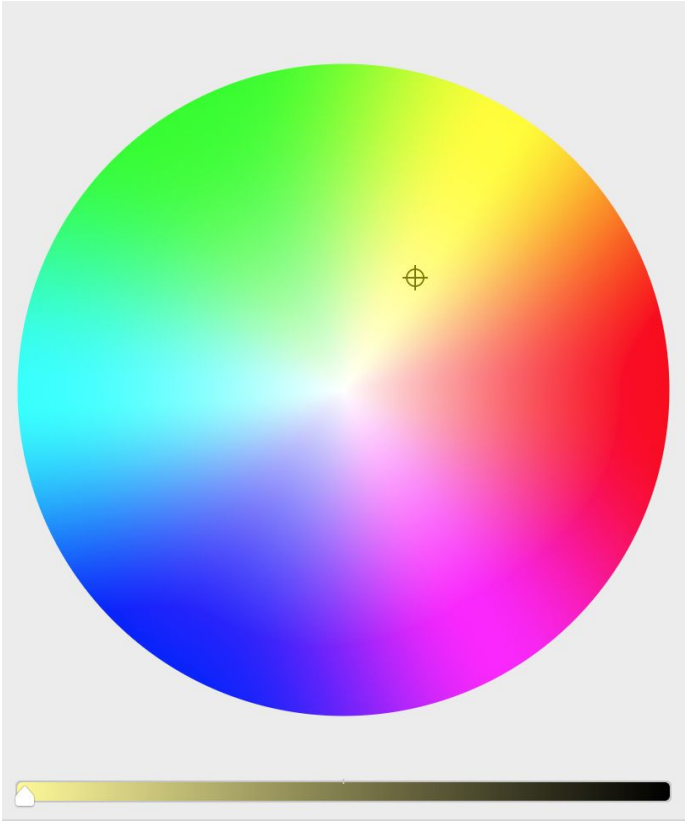


LAB

Different Approaches to Picking HSV Color

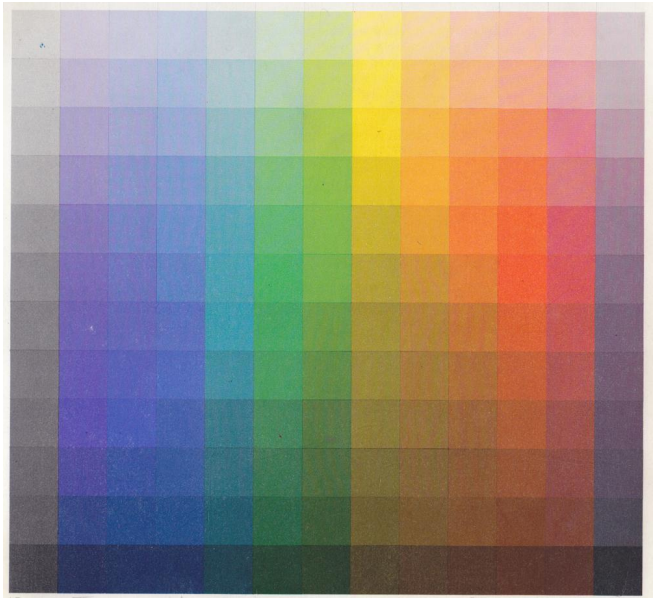


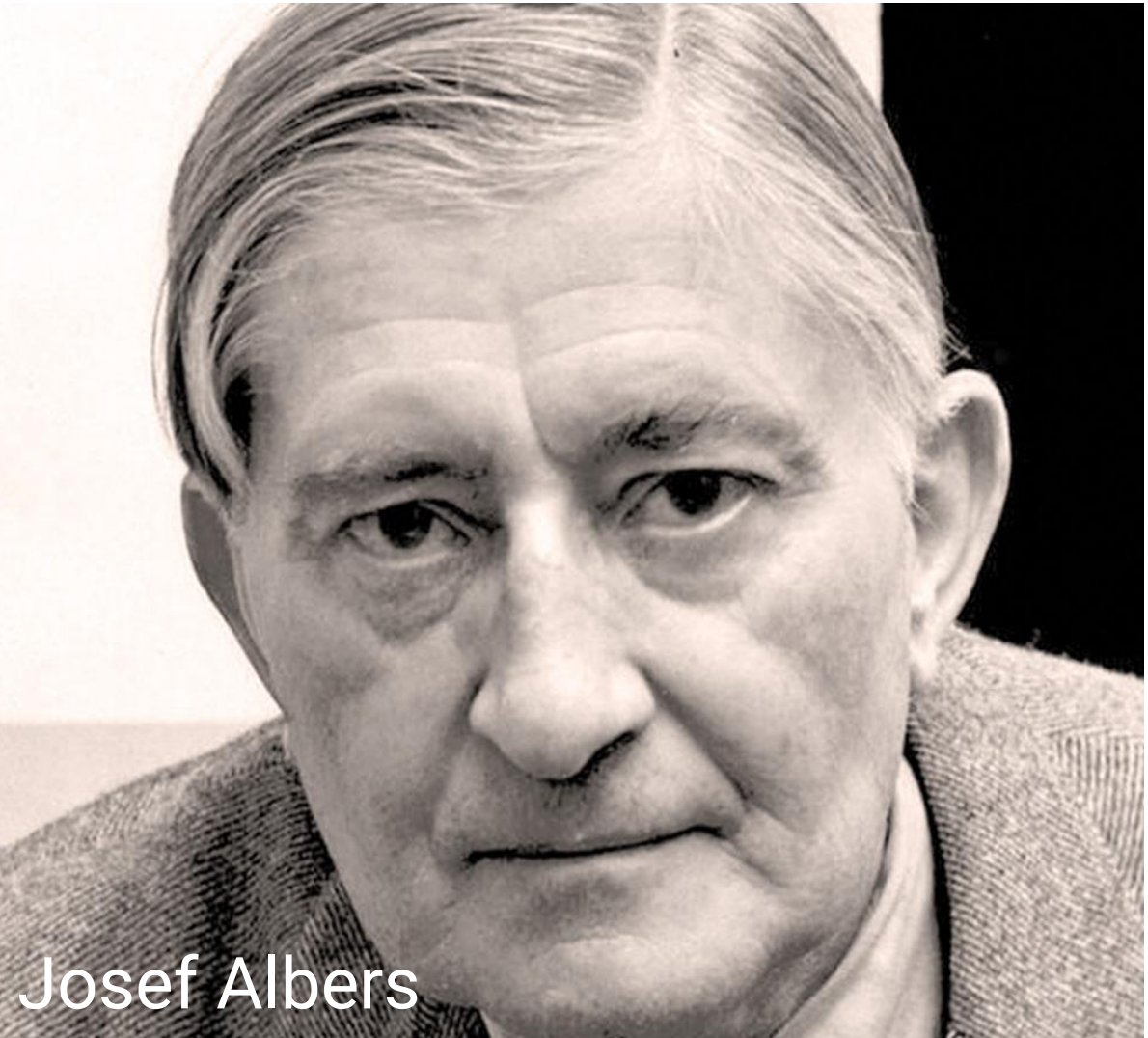
Hue Slider
Saturation x **B**rightness Field (X/Y axis)



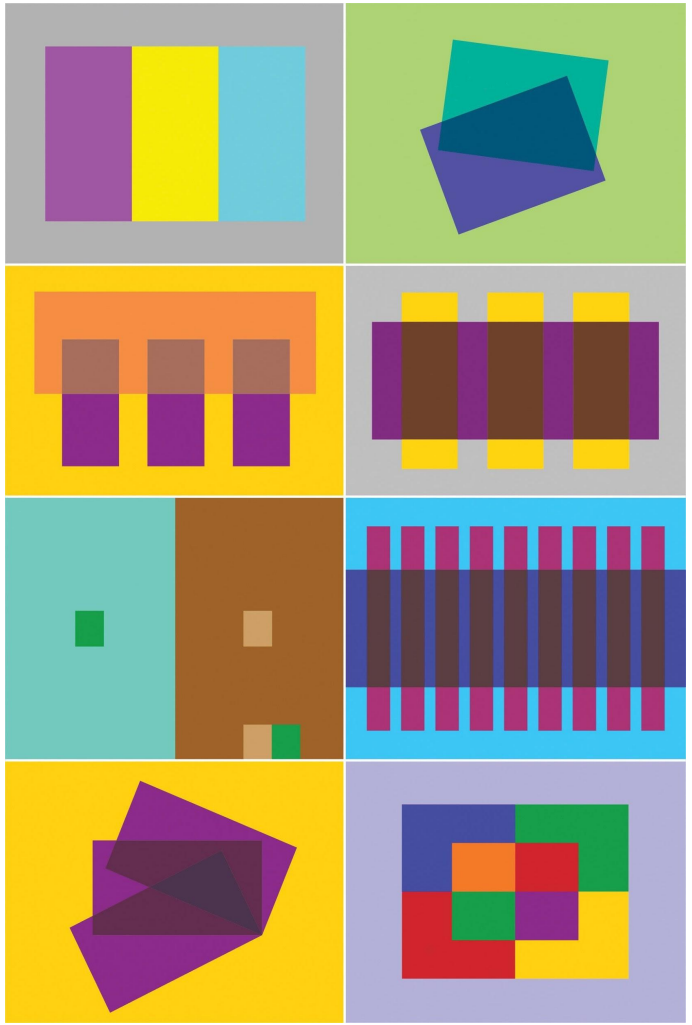
Hue x **S**aturation Field (degree x radius)
Brightnes slider

Johannes Itten



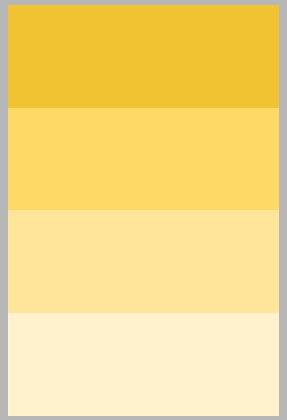


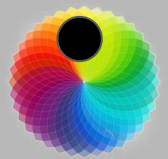
Josef Albers



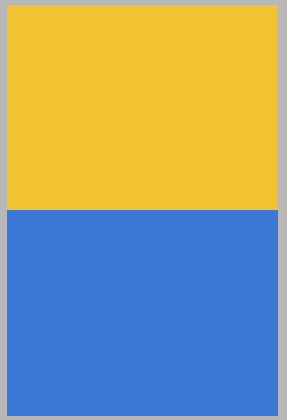
Creating a color palette

Monochrome

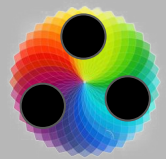




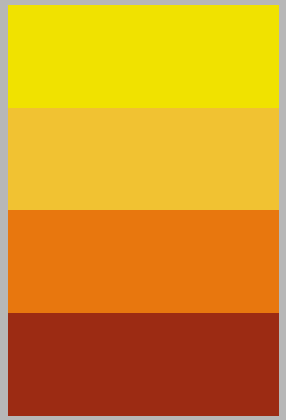
Complimentary



Triad



Analogus



Color Wheel https://color.adobe.com/create/color-wheel

Cornell Brand

Color	Swatch	PMS	Four-Color Process
Red		#187	C0 M100 Y79 K20
White		-	-
Grey		#Cool Grey 11	C72 M66 Y65 K72

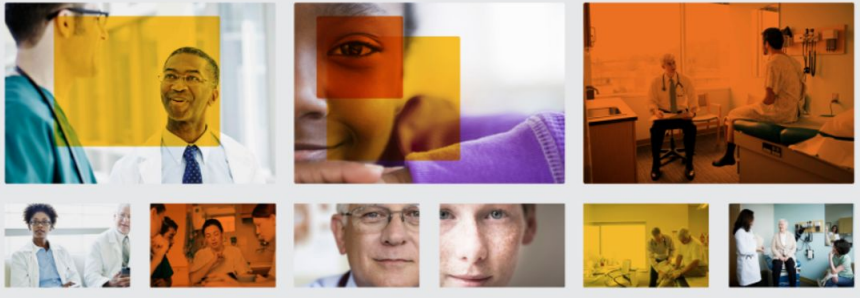
Weill Cornell Brand

Masterbrand logo lock-ups

Weill Cornell Medicine

Weill Cornell Medicine

Photography / color treatment



Iconography

Color palette

Red
Dark Orange
Bright Orange
Yellow

White
Black
Black 40% 30%
20% 10% 5%

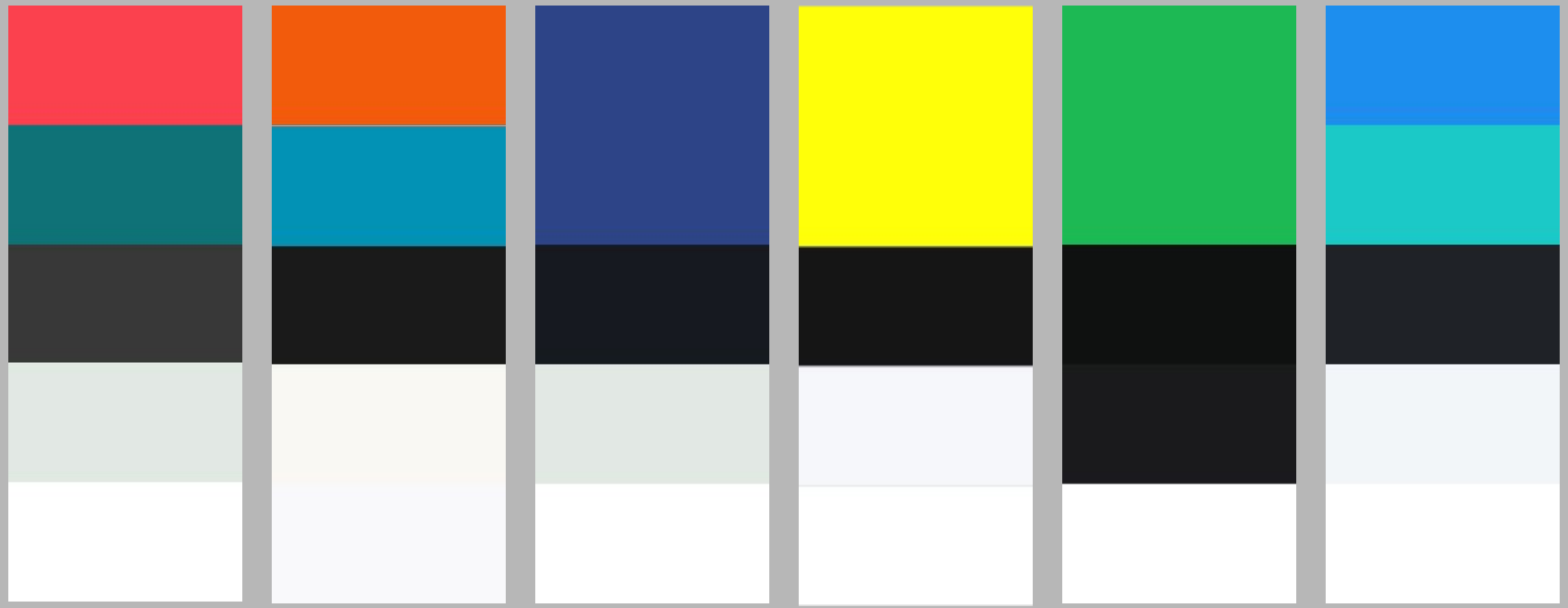
Typography

1898 Light /
1898 Light Italic /

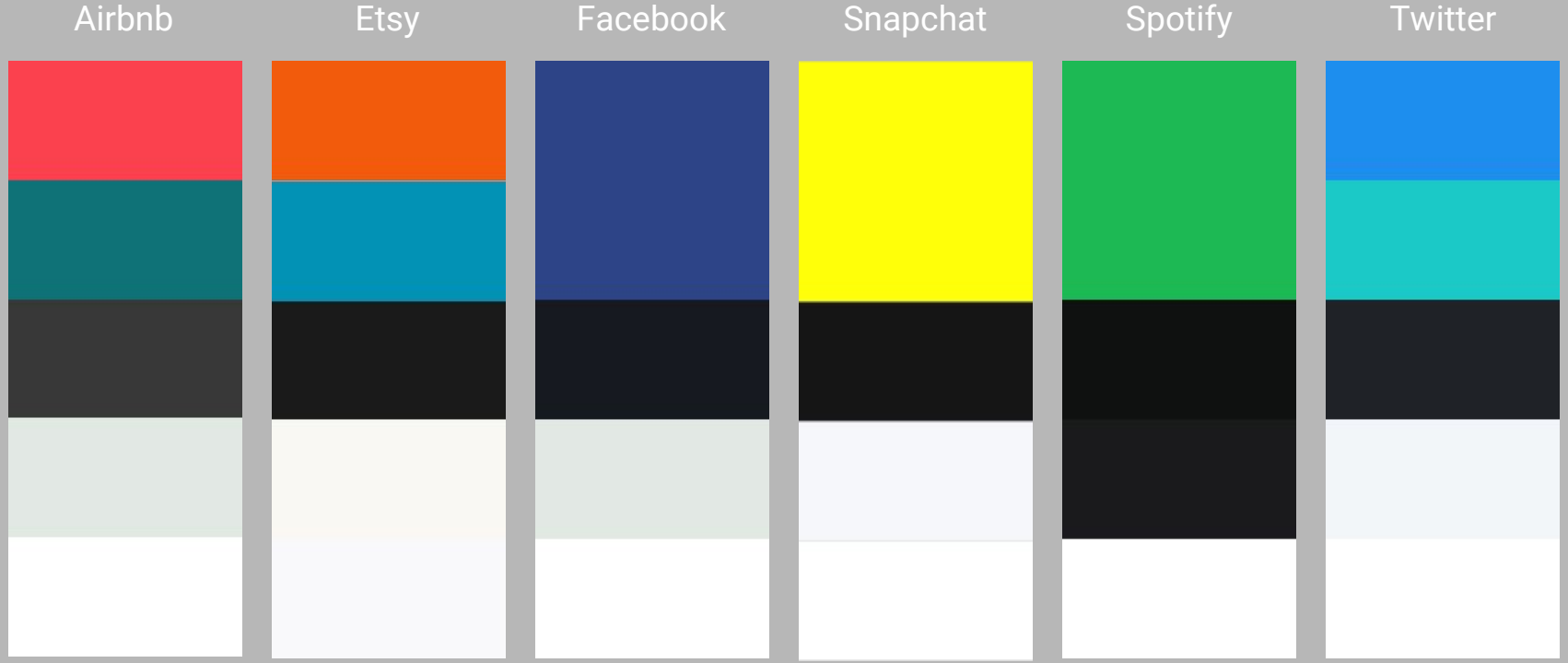
1898 Regular /
1898 Regular Italic /

1898 Bold /
1898 Bold Italic /

Identifying a color palette



Identifying a color palette



Digital Color Meter View Color Window Help

Lock Position ⌘L
Lock X ⌘X
Lock Y ⌘Y
Magnification ▶
Display Values ▶
Update Continuously
Show Mouse Location
Enter Full Screen

as Decimal
✓ as Hexadecimal
as Percentage

Digital Color Meter

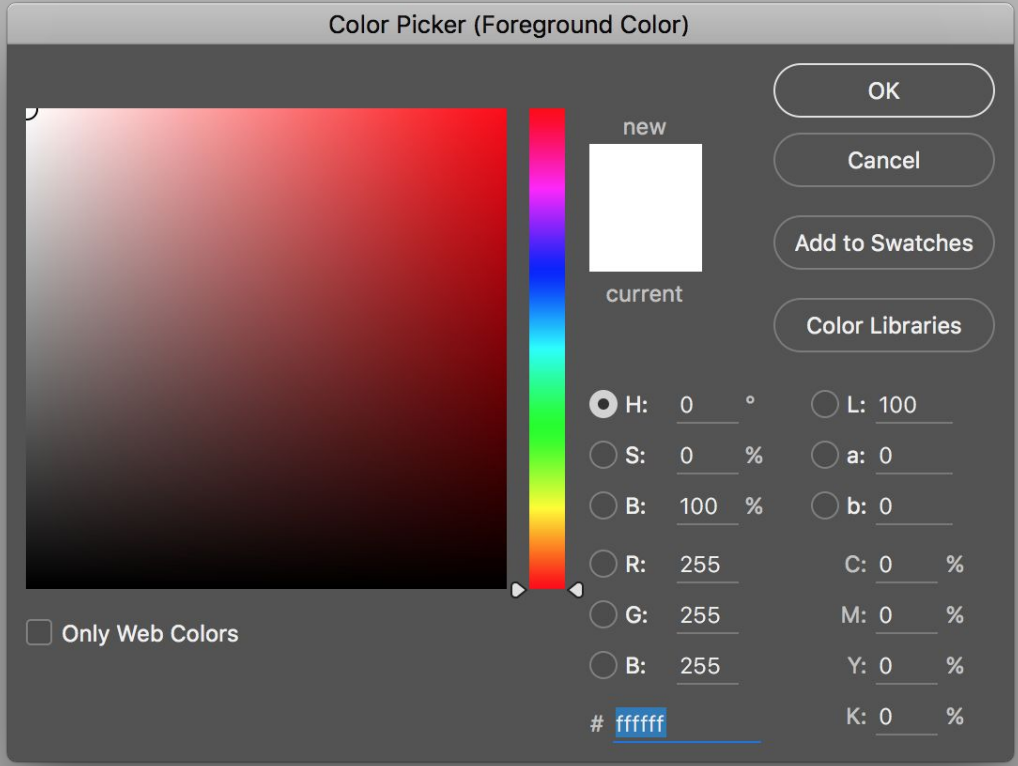
Display in Generic RGB

R: 0x71
G: 0x89
B: 0xA5

Color LCD

Aperture Size

921C2F
350
81
57
100
Hex
H
S
B
A
Global Colors


Color Picker (Foreground Color)
OK
Cancel
Add to Swatches
Color Libraries
new
current
Only Web Colors
H: 0 °
S: 0 %
B: 100 %
R: 255
G: 255
B: 255
ffffff
L: 100
a: 0
b: 0
C: 0 %
M: 0 %
Y: 0 %
K: 0 %

Final Comp Quiz: Color Study

Pick 1 App. Open up http://color.adobe.com

Slide 1/2:
Label the Primary, Secondary and any other colors in the palette.
What type of palette is this (Triad, Complementary etc.).
What deltas do you see from color.adobe.com. Why?

Slide 2:
Explore a new palette given the same Primary Color.
Why would this work? What tweaks would you make?

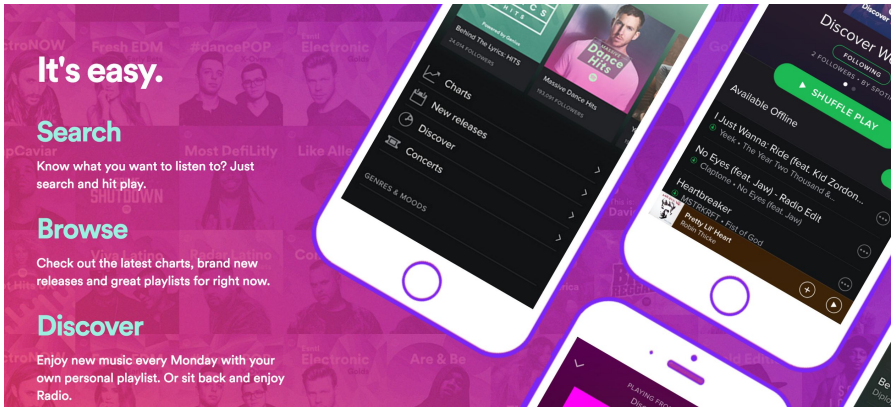
Slide 3:
Watch the numbers change! Write 1 sentence on what you see happening with H,S,V

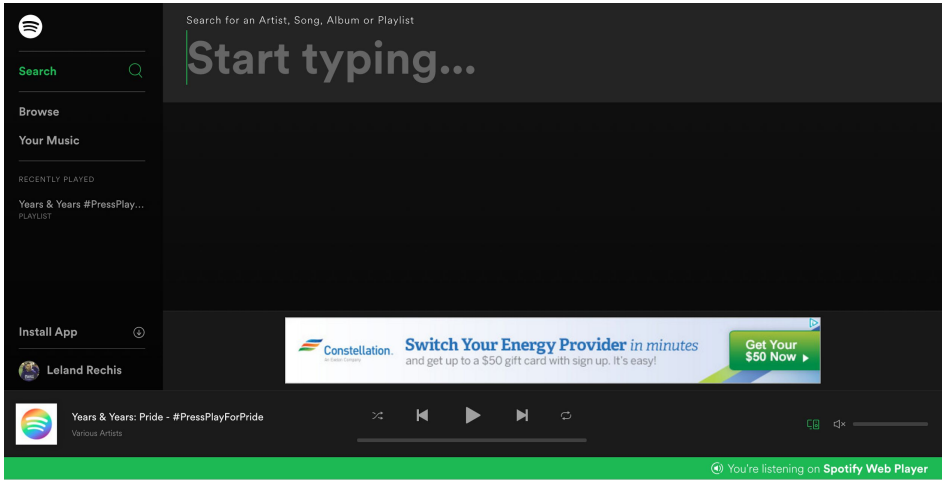
Example Spotify

Primary
HSV: 144,84,73
RGB: #1db954ff

Secondary
HSV: 0,0,0
RGB: #000000

Secondary
HSV: 265,100,96
RGB: #6700f6





Other Resources

Johanes Itten’s Seven Kind’s of Color Contrast Explained

ColorClaim A Palette Moodboard

Another fun color picker app Colour Co

Color matching game Color