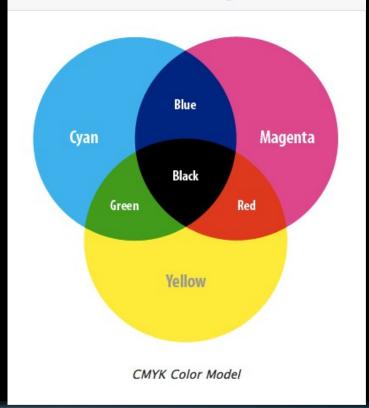
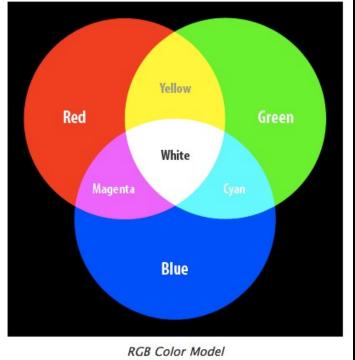
# **Color Systems**

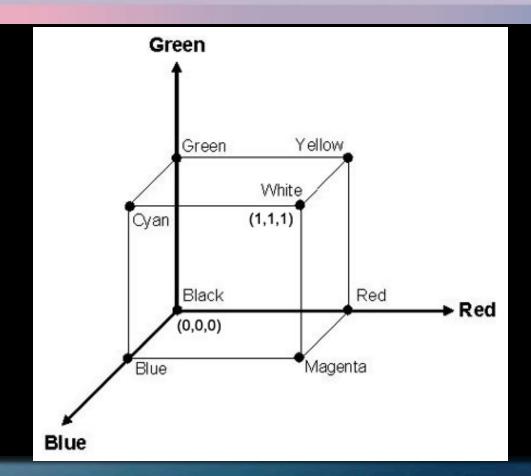
CMYK – The Subtractive System



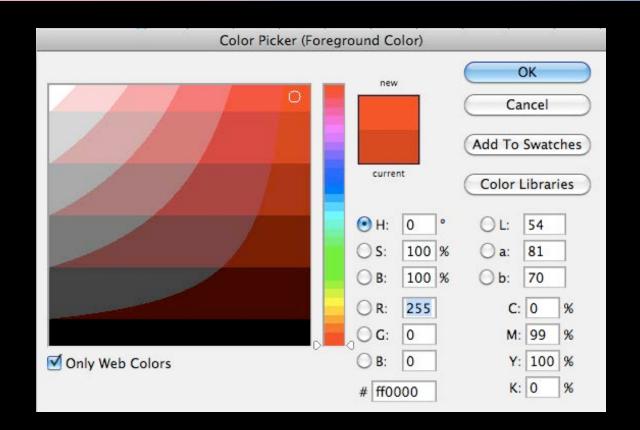
#### RGB – The Additive System



## **Color Cube**



## Color Picker (in Photoshop)





### **RGB** Color

Values for red, green, and blue are expressed as numbers between 0 and 255.

rgb(255,0,0)

This red color is made up of the following values:

255 red

0 green

0 blue

In mathematics and computer science, hexadecimal (also base 16, or hex) is a positional numeral system with a radix, or base, of 16.

It uses sixteen distinct symbols, most often the symbols 0–9 to represent values zero to nine, and A, B, C, D, E, F (or alternatively a–f) to represent values ten to fifteen.

Hexadecimal numbers are used on web pages to specify colors.

Decimal:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Hexadecimal:	0	1	2	3	4	5	6	7	8	9	Α	В	С	D	E	F

No intensity

Full intensity



The color is defined by its mix of Red, Green and Blue intensities, each of which can be in the range:

- 0 to 255 (in decimal)
- 00 to FF (in hexadecimal)

```
HEX # rrggbb

BLACK #000000

WHITE #FFFFFF
```

```
HEX # rrggbb
red #FF0000
green #00FF00
blue #0000FF
```

- The first two digits are the red color blend, from no intensity (00) to full intensity red (FF)
- The second two digits are the green color blend, from no intensity (00) to full intensity red (FF)
- The third two digits are the blue color blend, from no intensity (00) to full intensity red (FF)

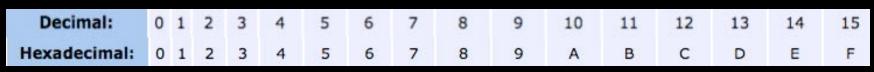


```
HEX # rrggbb

cyan # ?

pink # ?
```

#### What the HEX?



No intensity

Full intensity

