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EVOLVING YOUR CREATIVE CRAFT

Colour Theory



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Colour Theory

Colour Theory

Lecture Contents

- 1 Introduction**
- 2 Colour Wheels**
- 3 Colour Harmonies**
- 4 Colour Models**



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Colour Theory

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Introduction



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Colour Theory

Color theory is about how color works – the more you understand this, the better a designer you'll be.

Color theory is a science in itself. Studying how colors affect different people, either individually or as a group, is something some people build their careers on.

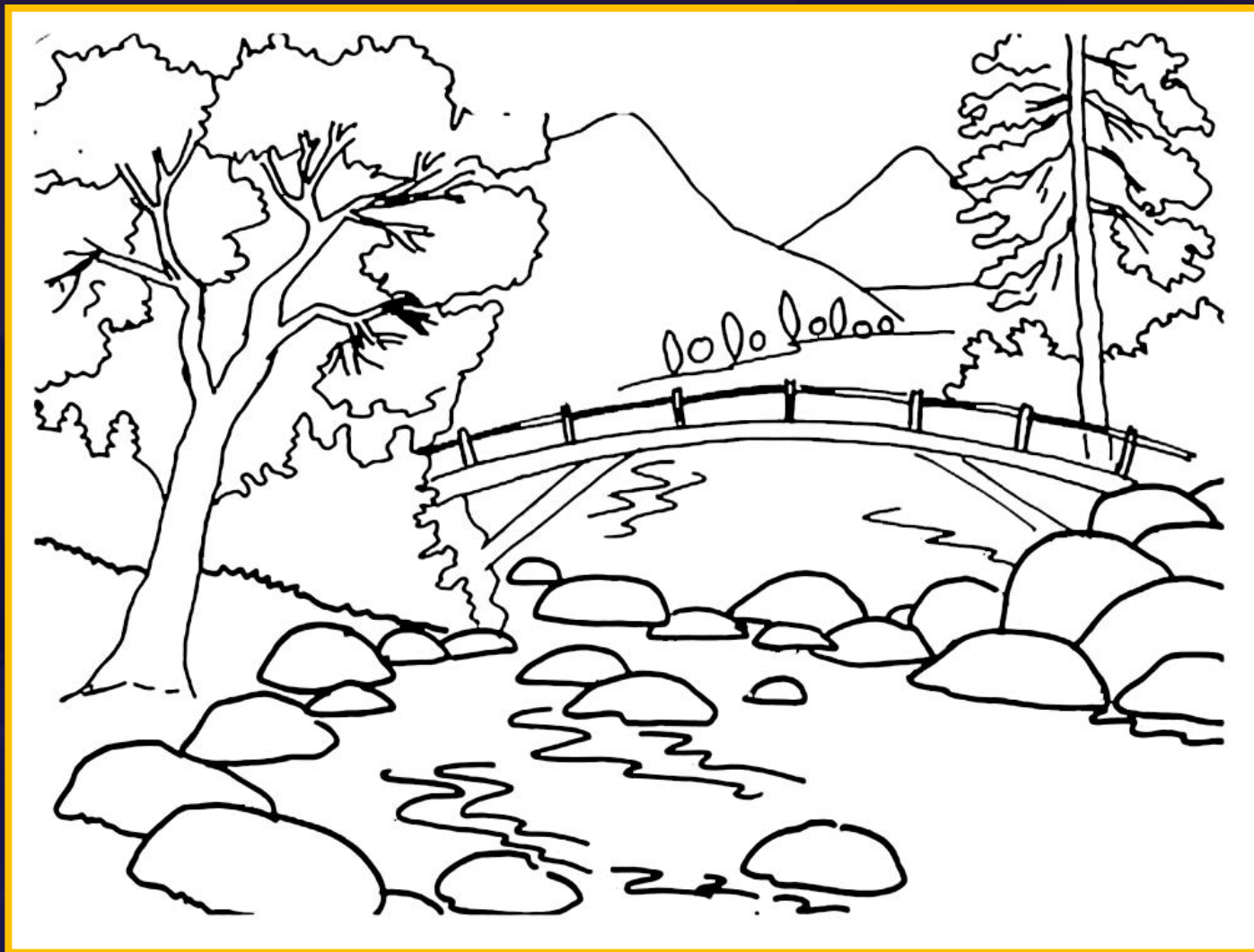
Something as simple as changing the exact hue or saturation of a color can evoke a completely different feeling. [1]



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Colour Theory

Colour Exercise 1: Freestyle (5 mins)





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Colour Theory

Colour Theory

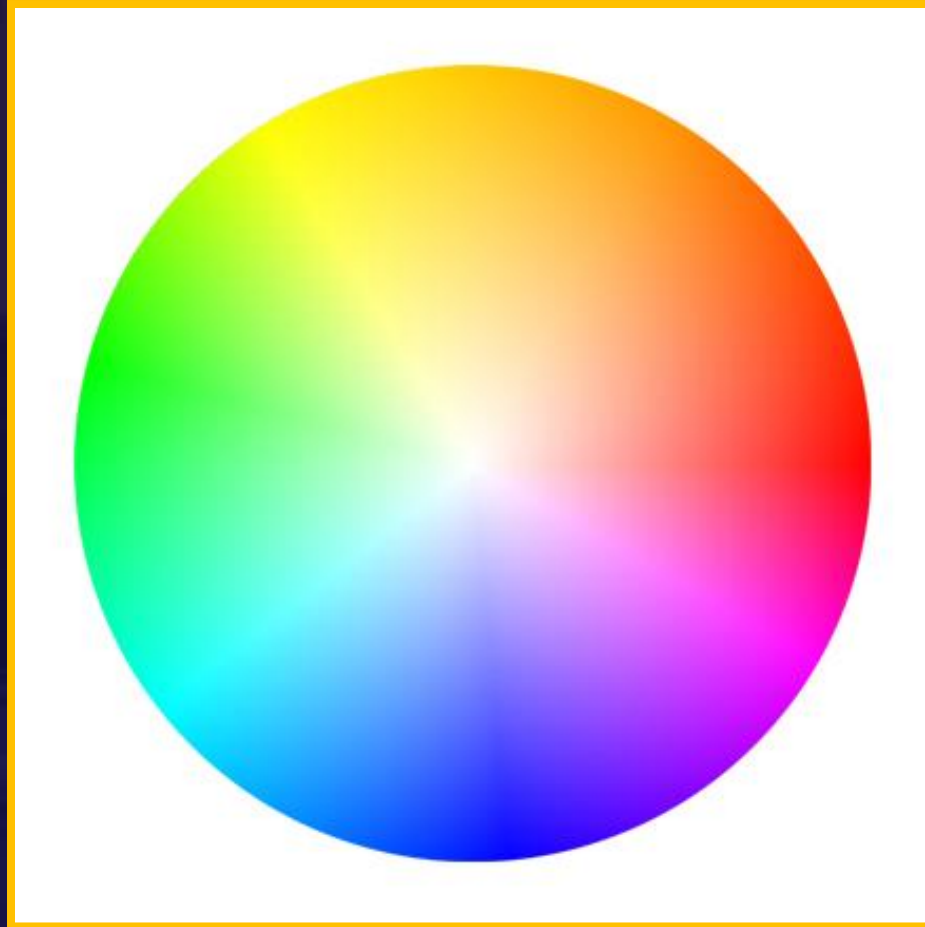
Colour Wheels



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Colour Theory

Color wheels show how primary colors blend to create other distinct hues [2].





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Colour Theory

Traditionally, the color wheel consists of [2]:



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Colour Theory

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Primary colors: Typically **Red**, **Yellow** and **Blue**.



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Colour Theory

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Primary colors: Typically **Red**, **Yellow** and **Blue**.

Secondary colors: **Green**, **orange** and **purple** hues created by mixing primary colors



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Colour Theory

Traditionally, the color wheel consists of [2]:

Primary colors: Typically **Red**, **Yellow** and **Blue**.

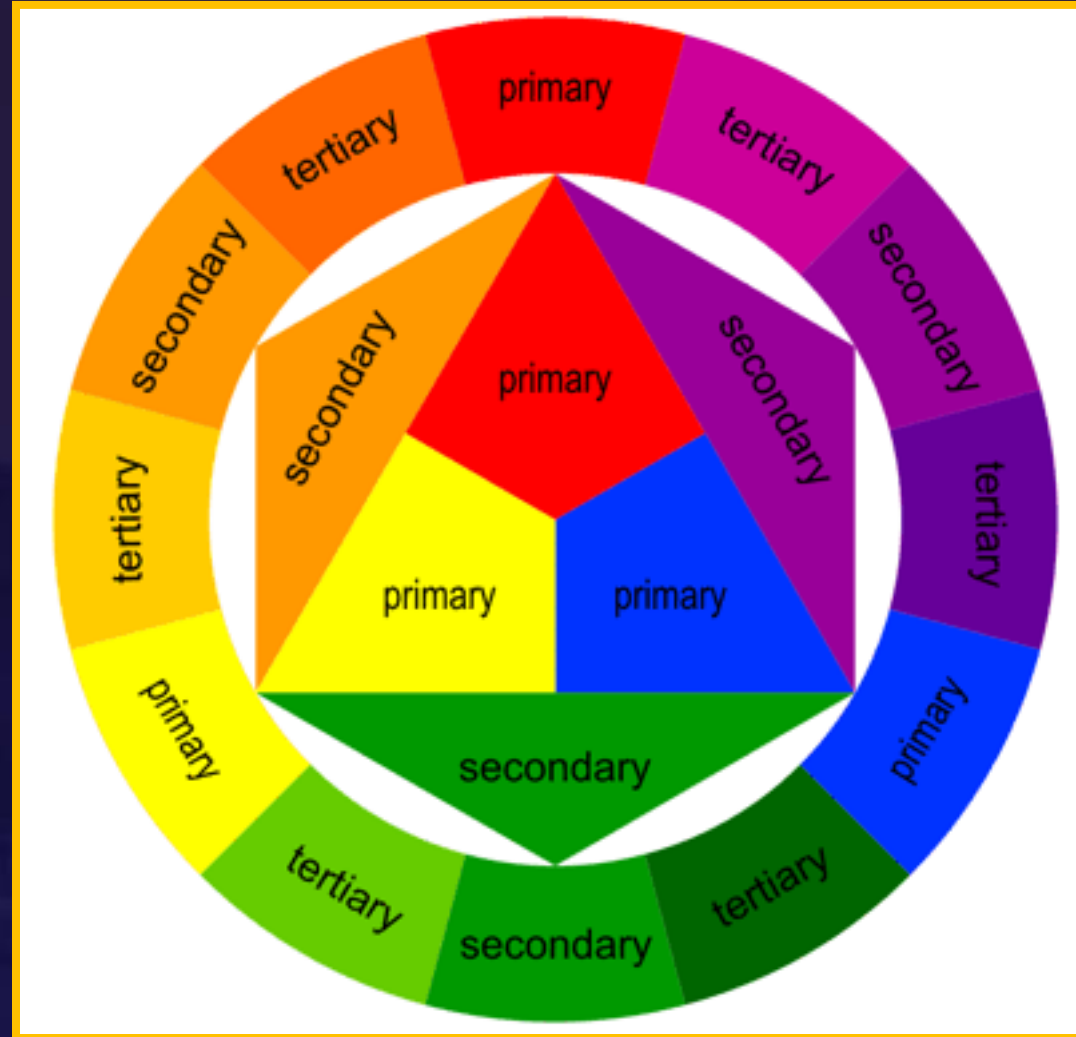
Secondary colors: **Green**, **orange** and **purple** hues created by mixing primary colors

Tertiary colors: Further color hues you get by mixing a **primary color** with a **secondary color**. They are usually named with two words: **blue-green**, **red-violet**, **yellow-orange**.



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Primary – Secondary - Tertiary



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Why is this useful?

It helps you quickly grasp the following [2]:



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It helps you quickly grasp the following [2]:

- **How colors relate to each other**



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Colour Theory

Why is this useful?

It helps you quickly grasp the following [2]:

- **How colors relate to each other**
- **Which combinations work best through color wheel harmonies**



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Colour Theory

Colour Wheels: Warm / Cool Colours [3]





Warm Colours

Warm colors include **red**, **orange**, and **yellow**, and variations of those three colors. These are generally energizing, passionate, and positive.

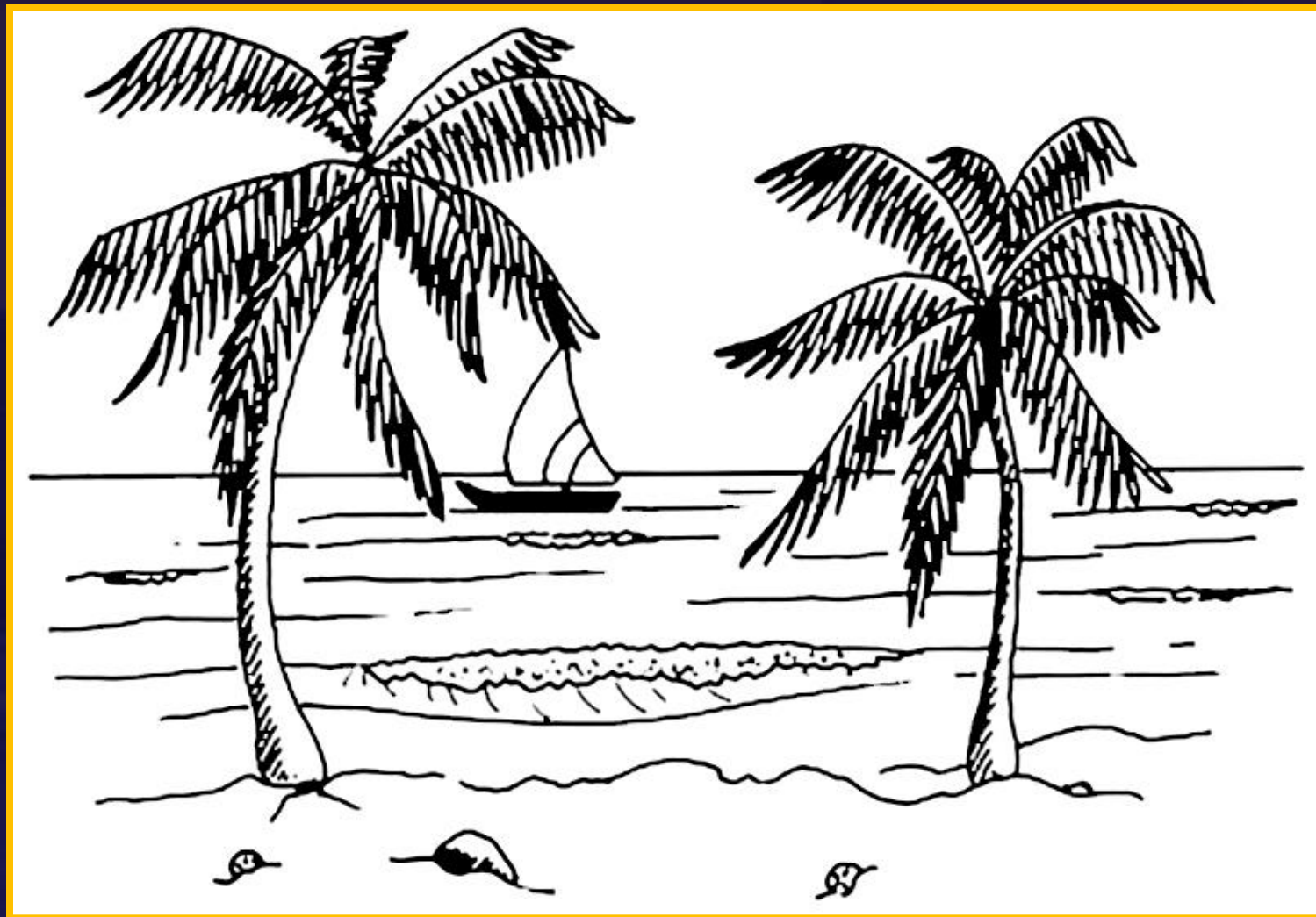
Red and **yellow** are both primary colors, with **orange** falling in the middle. Warm colors are all truly warm and aren't created by combining a warm color with a cool color [1].



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Colour Theory

Colour Exercise 2: Use ONLY Warm Colours (5 mins)





Cool Colours

Cool colors include **green**, **blue**, and **purple**, are often more subdued than warm colors. They are usually calming, relaxing, and somewhat reserved.

Blue is the only primary color within the cool spectrum, which means the other colors are created by combining blue with a warm color (yellow for green and red for purple). **Greens** take on some of the attributes of yellow, and **purple** takes on some of the attributes of red [1].





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Colour Exercise 3: Use ONLY Cool Colours (5 mins)





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Colour Theory

Colour Harmonies



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Colour Theory

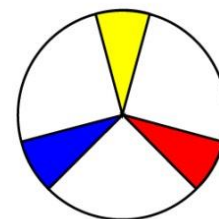
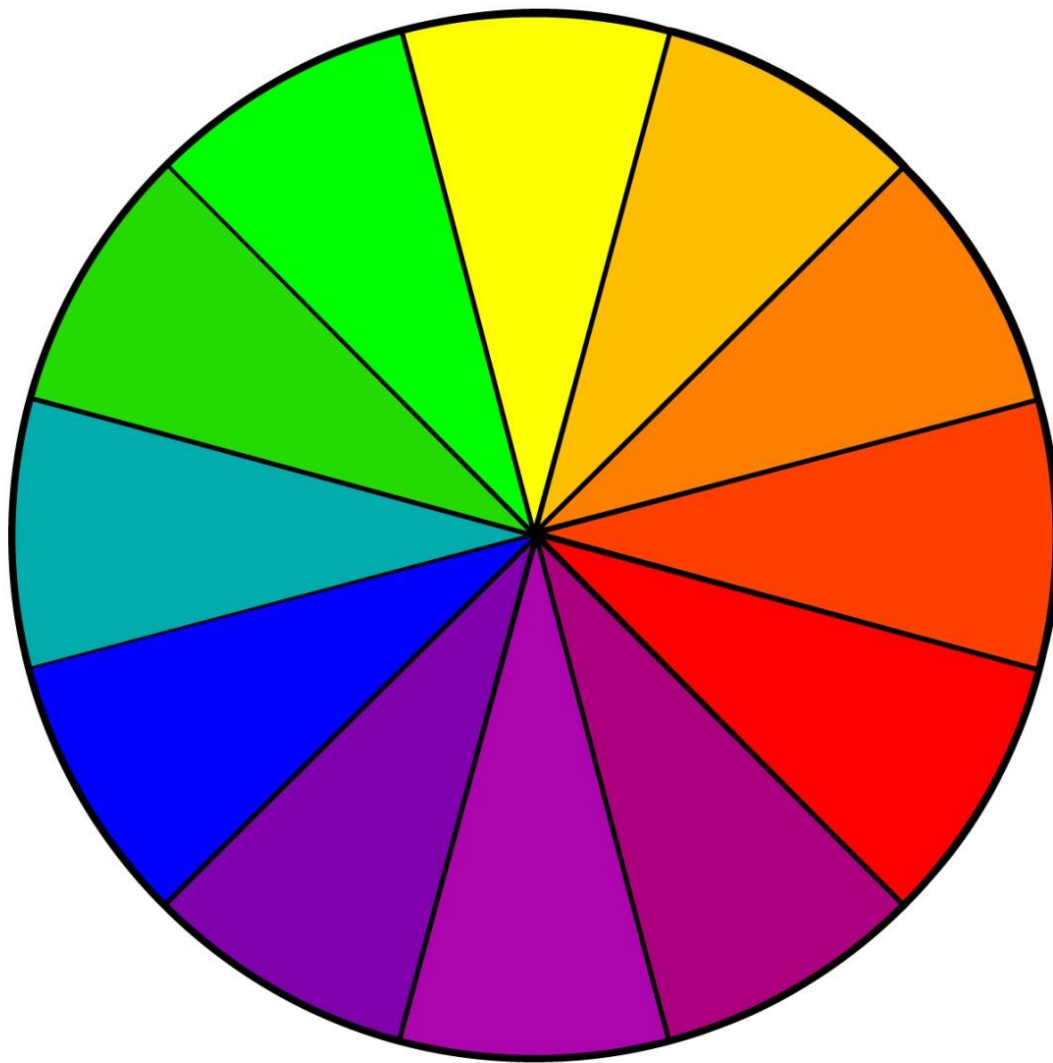
Harmonies are created by picking colors from the wheel according to predefined schemes, such as analogous, complementary or triad.

These combinations always look **balanced, natural and eye pleasing** [2].



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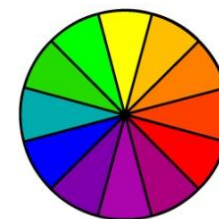
Colour Theory



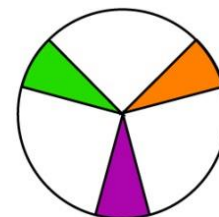
primary



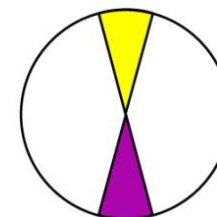
analogous



hue



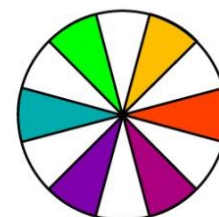
secondary



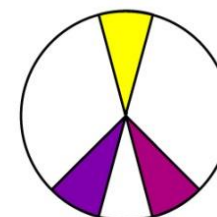
complementary



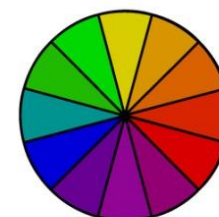
tint



intermediate



split complementary



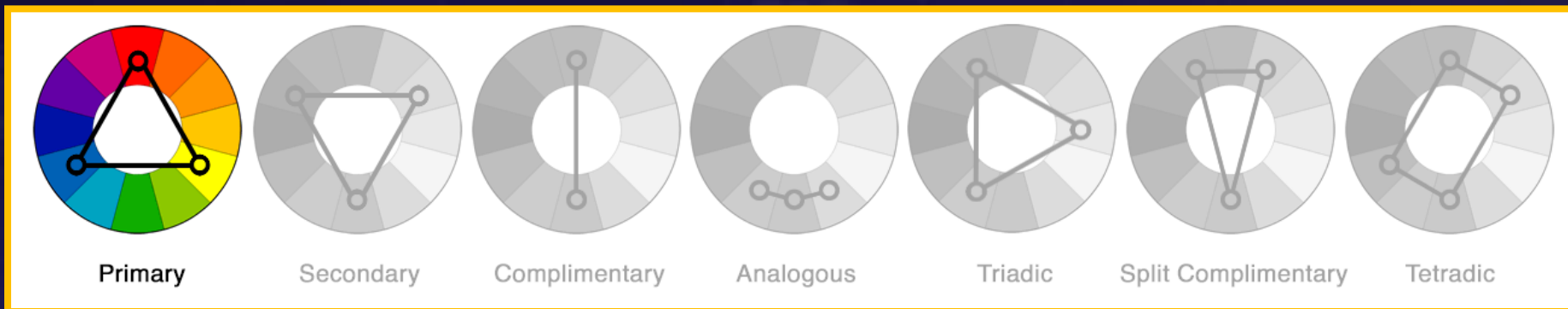
shade



Colour Harmonies: Primary

These are colours that cannot be created through the mixing of other colours.

They are colours in their own right. The three primary colours are **RED**, **YELLOW** and **BLUE**.





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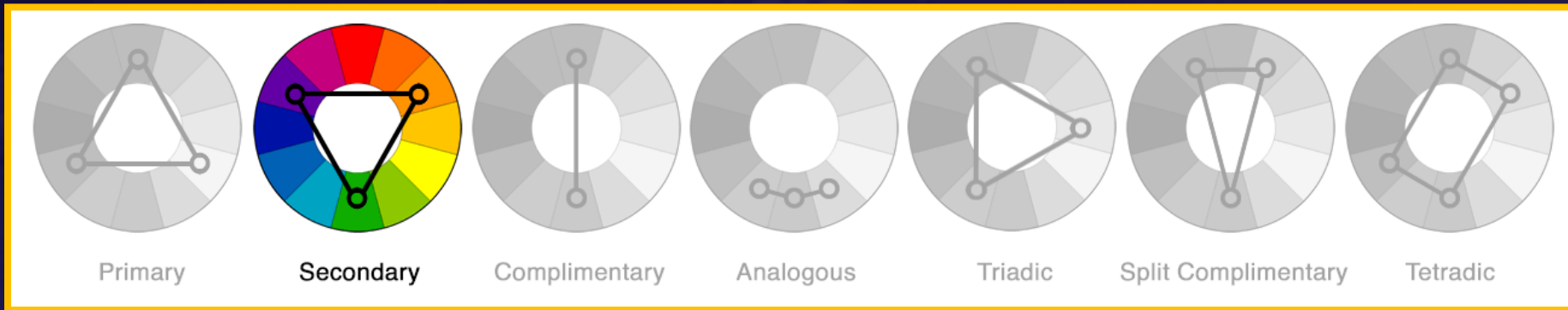
Colour Harmonies: Secondary

Primary colours can be mixed together to produce **secondary** colours.

Yellow + Blue = **GREEN**

Blue + Red = **PURPLE**

Red + Yellow = **ORANGE**

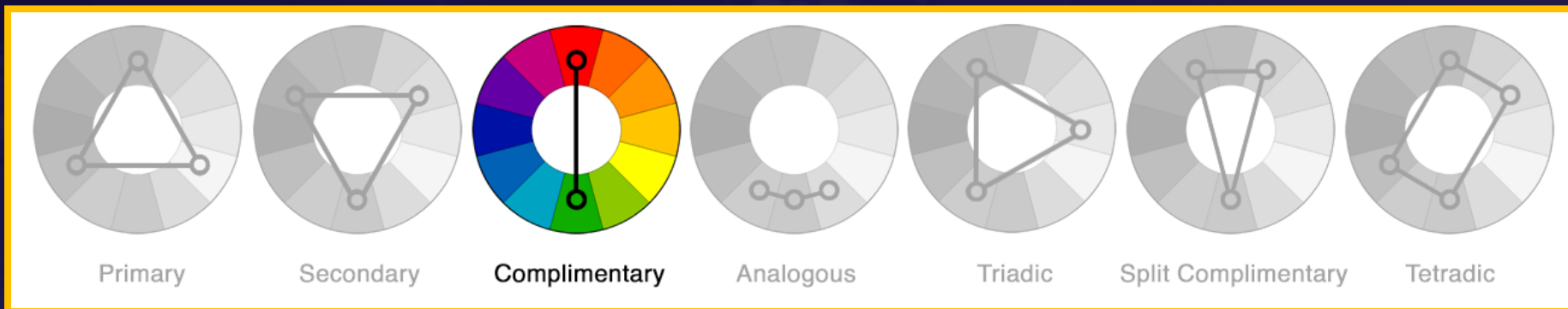




Colour Harmonies: Complimentary

Colours that are opposite each other on the colour wheel are considered to be **complimentary colours** (e.g. **red** and **green**).

The high contrast of complimentary colours creates a vibrant look especially when used at full saturation. This colour scheme **must be managed well so it is not jarring**.

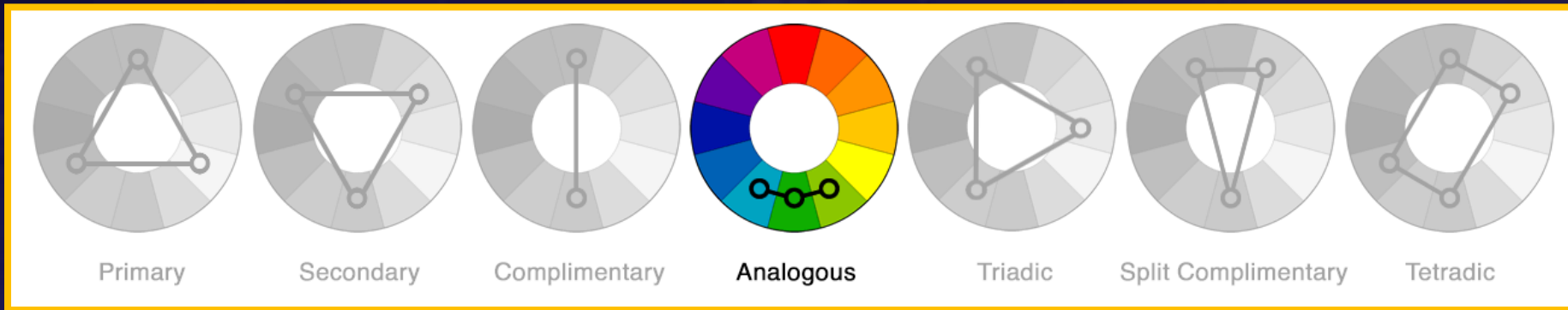




Colour Harmonies: Analogous

Analogous colour schemes use colours that are **next to each other** on the colour wheel. They usually match well and create serene and comfortable designs.

Analogous colour schemes are **often found in nature** and are **harmonious and pleasing to the eye**.

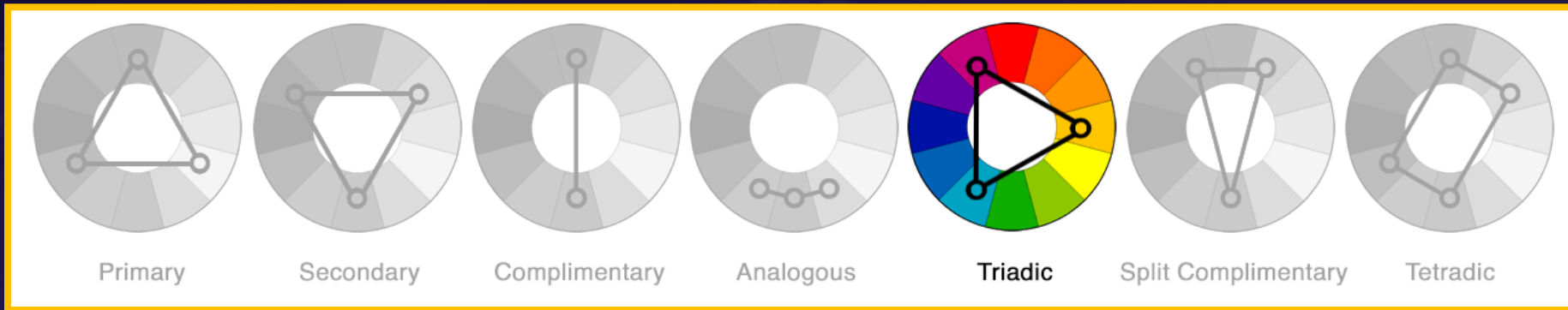




Colour Harmonies: Triadic Colours

A **Triadic** colour scheme uses colours that are **evenly spaced around the colour wheel**.

Triadic colour schemes tend to be quite **vibrant**, even if you use pale or unsaturated versions of your hues.

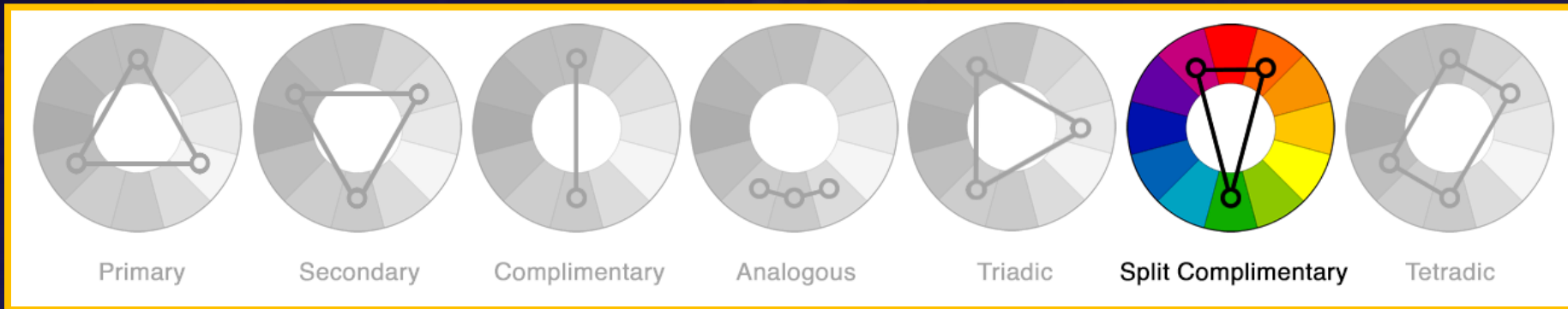




Colour Harmonies: Split Complimentary

The split-complimentary colour scheme is a variation of the complimentary colour scheme.

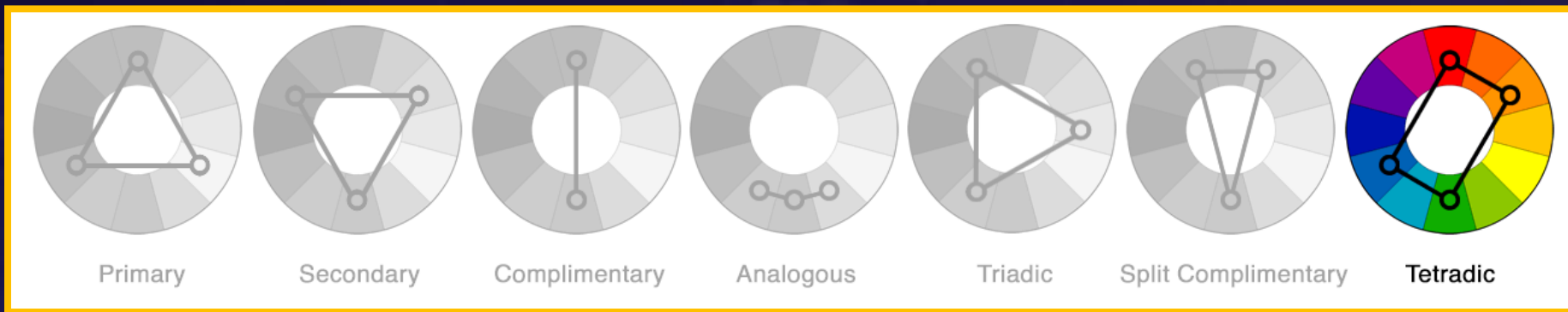
In addition to the base colour, it uses the **two colours adjacent to its compliment**.





Colour Harmonies: Tetradic Colours

The **Tetradic** (double complementary) colour scheme is the richest of all the schemes because it uses **four colors** arranged into **two complementary color pairs**.

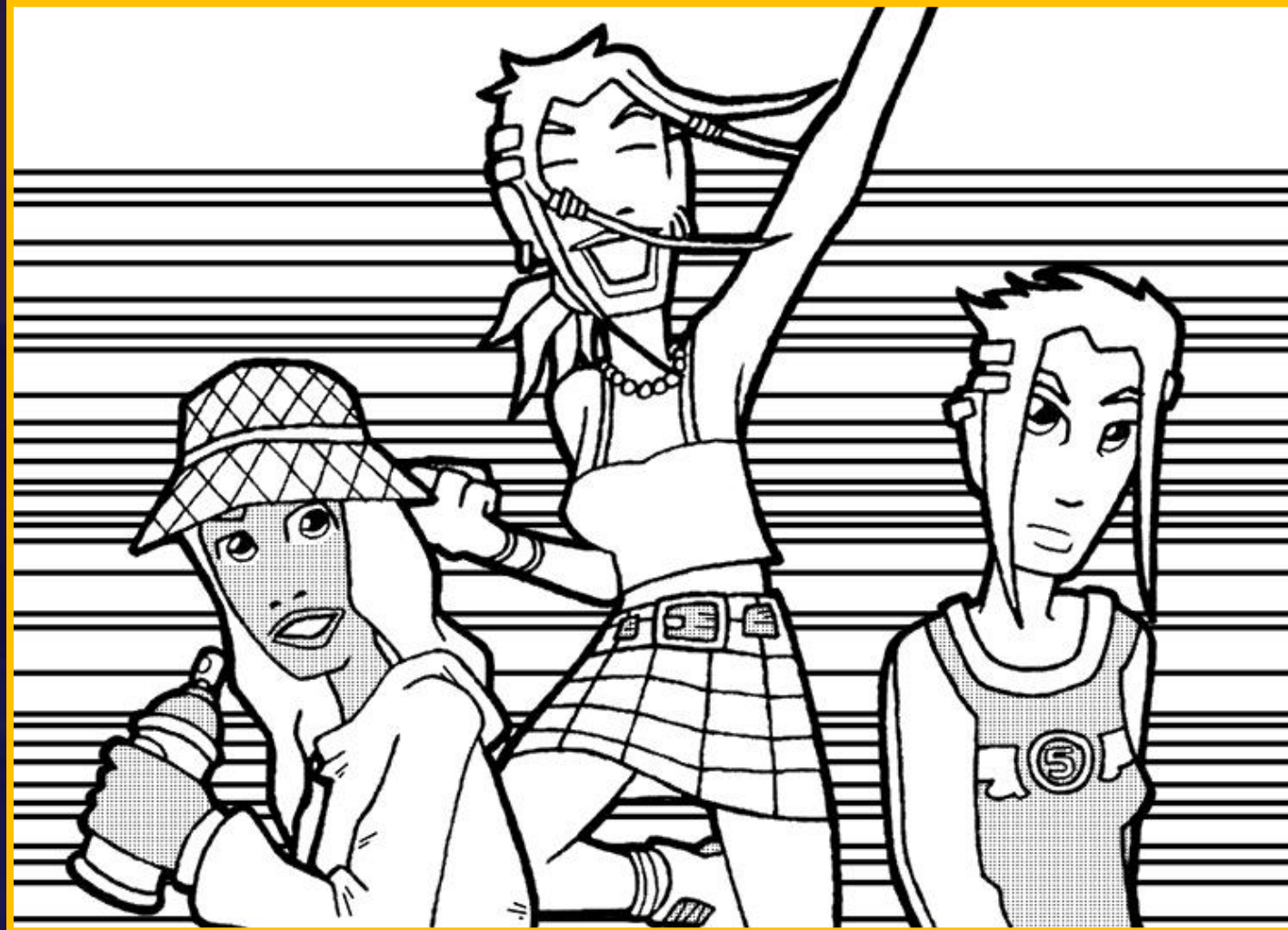




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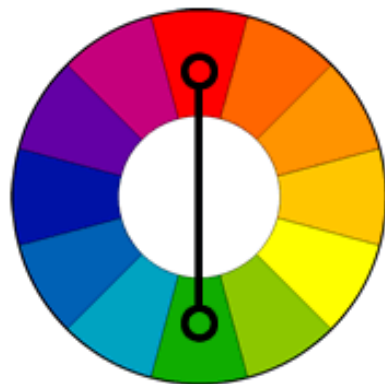
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Colour Exercise 4: Use Colour Harmonies (10 mins)





Colour Exercise 4: Use Colour Harmonies (10 mins)



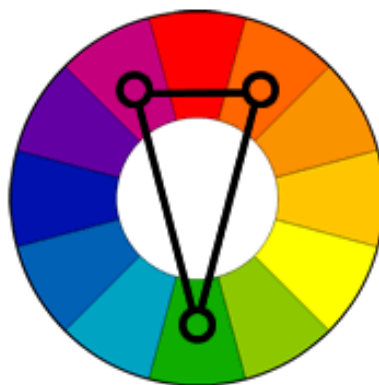
Complementary



Analogous



Triadic



Split Complementary



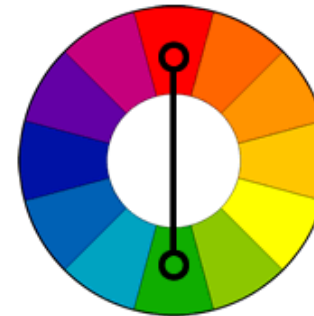
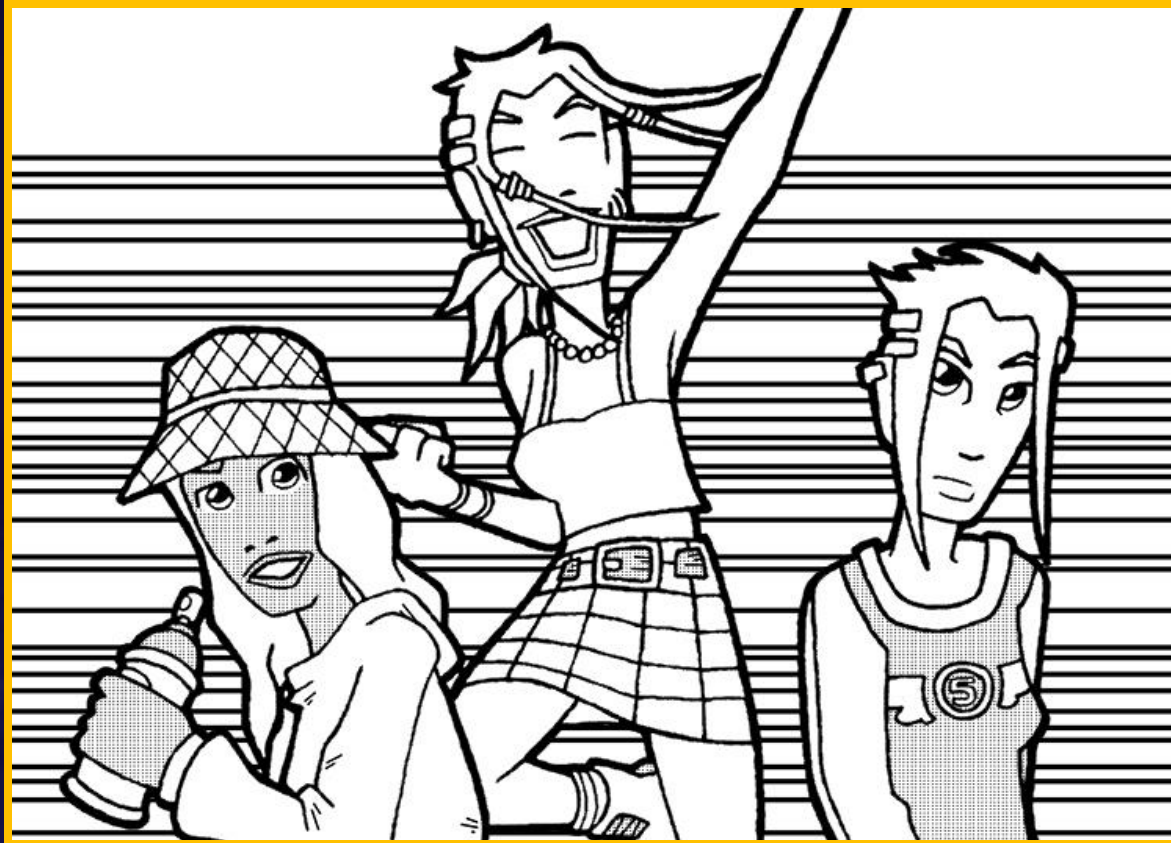
Tetradic



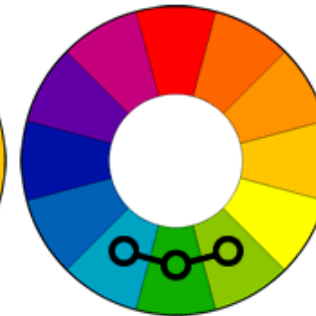
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Colour Exercise 4: Use Colour Harmonies (10 mins)



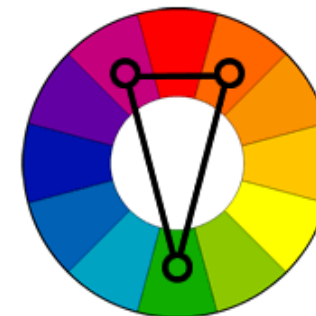
Complementary



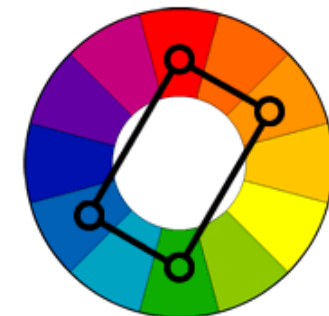
Analogous



Triadic



Split Complementary



Tetradic



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Colour Models

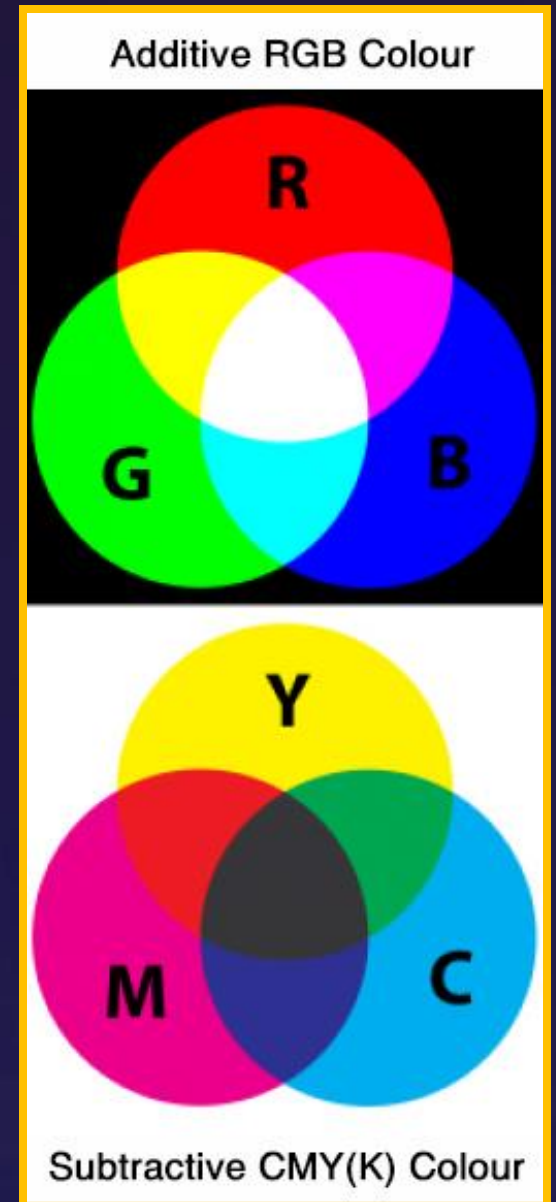


Colour Models: The RGB model

Mixing light, or additive model, is perhaps the most intuitive one. It allows you to create colours by **mixing red, green and blue light sources** in various intensities.

The more light you add, the brighter the colour mix becomes, which is the reason this mixing process is called “additive”.

Essentially, this is the way we physically perceive colours.

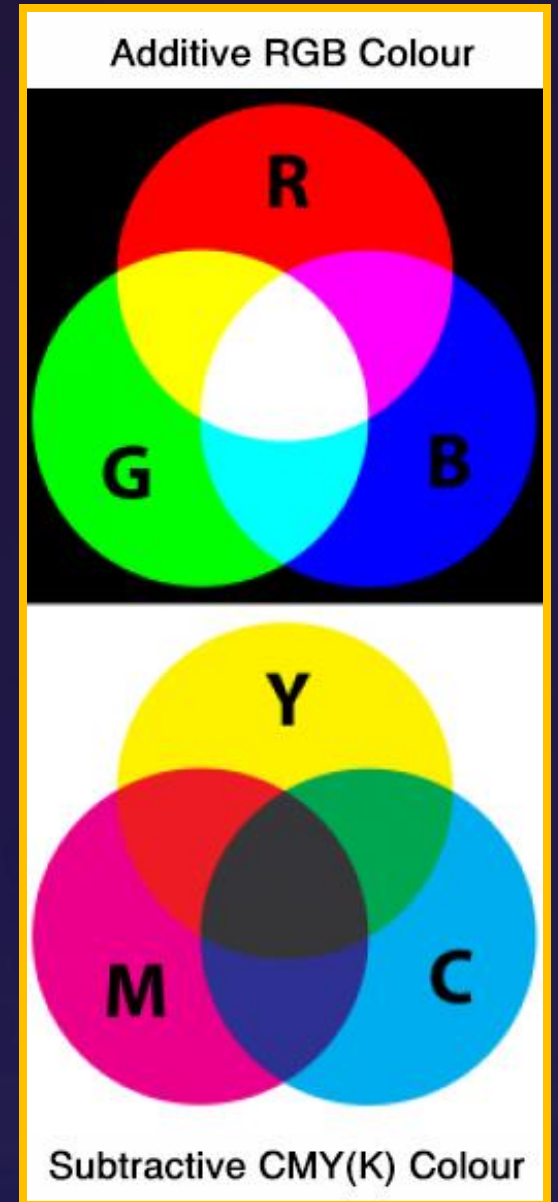




Colour Models: The CMYK model

This is standard subtractive, printing color model.

Each color is represented by a corresponding value of cyan, magenta, yellow and black inks, on a scale from 0% to 100%.

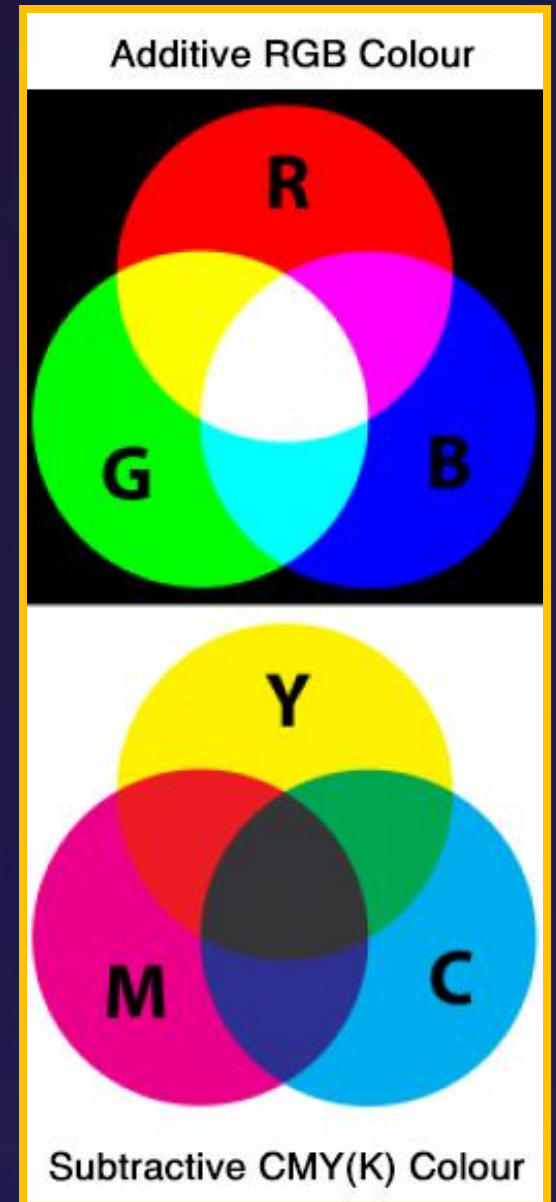




Colour Models: The CMYK model

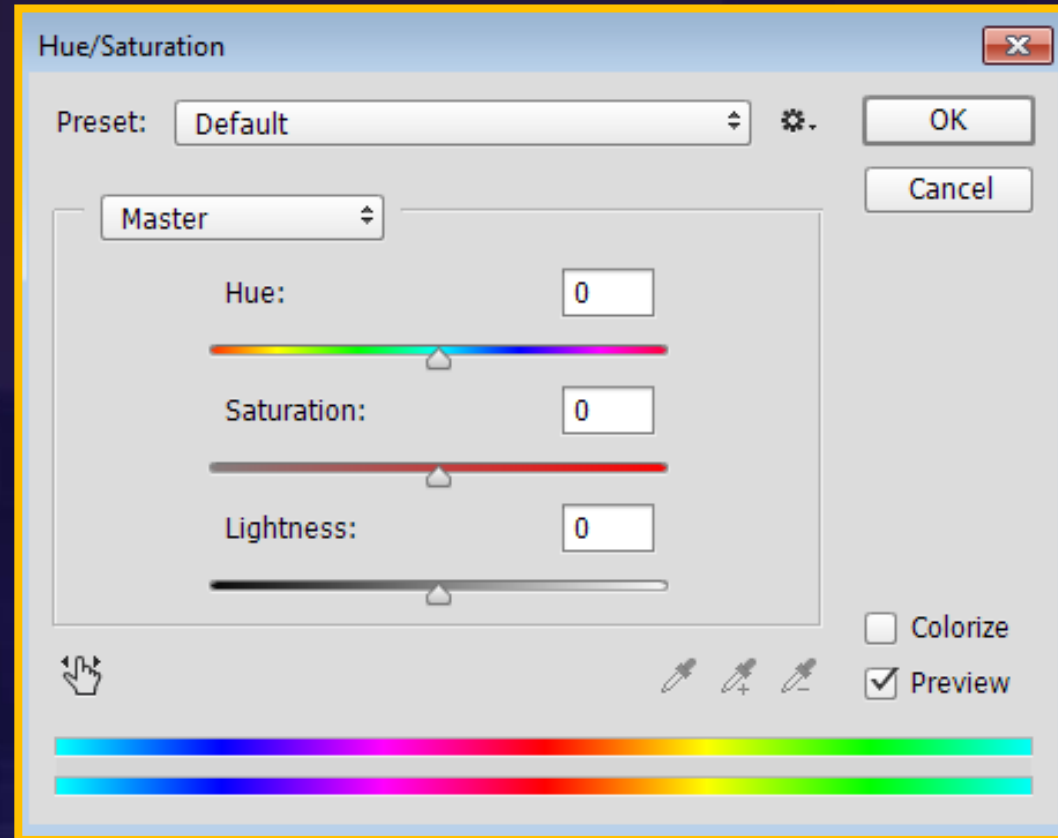
Traditionally, the primary colours used in subtractive process were red, yellow and blue, as these were the colours painters mixed to get all other hues.

As printing emerged, they were subsequently replaced with cyan, magenta, yellow and black (CMYK), as this colour combination enables printers to produce a wider variety of colours on paper.





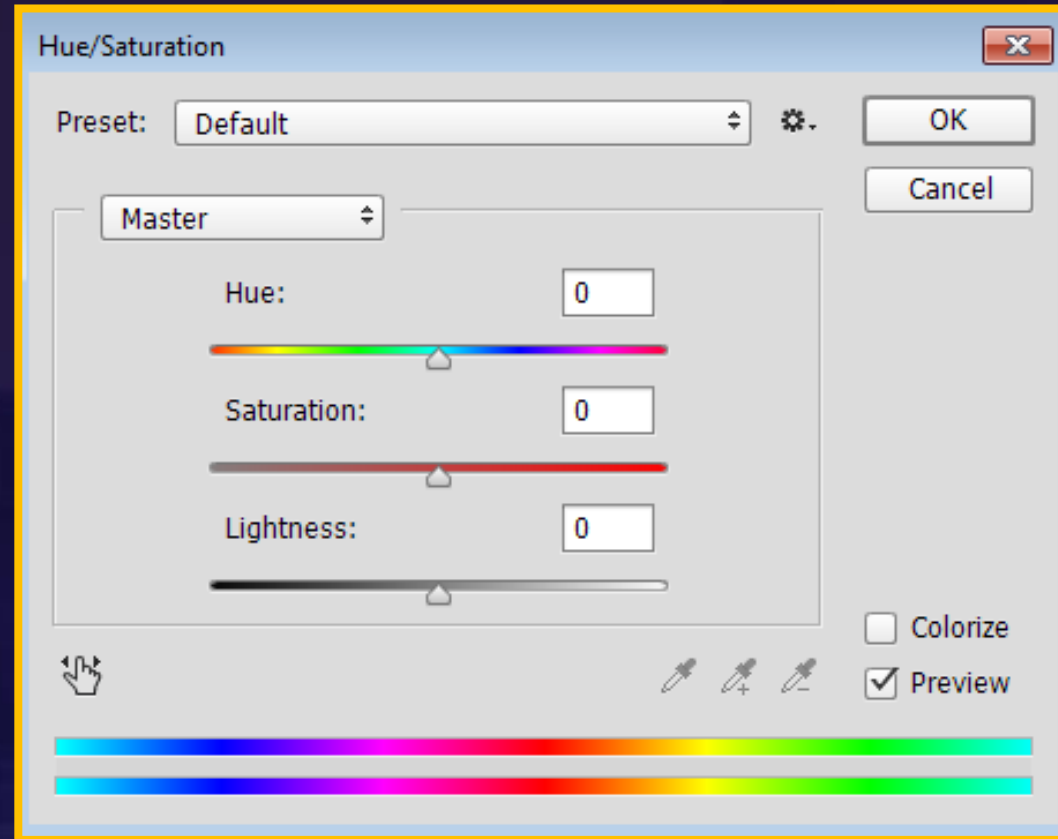
Colour Models: HSB model (or HSL / HSV)



This color model is based on RGB but is **better suited to artists and designers.**



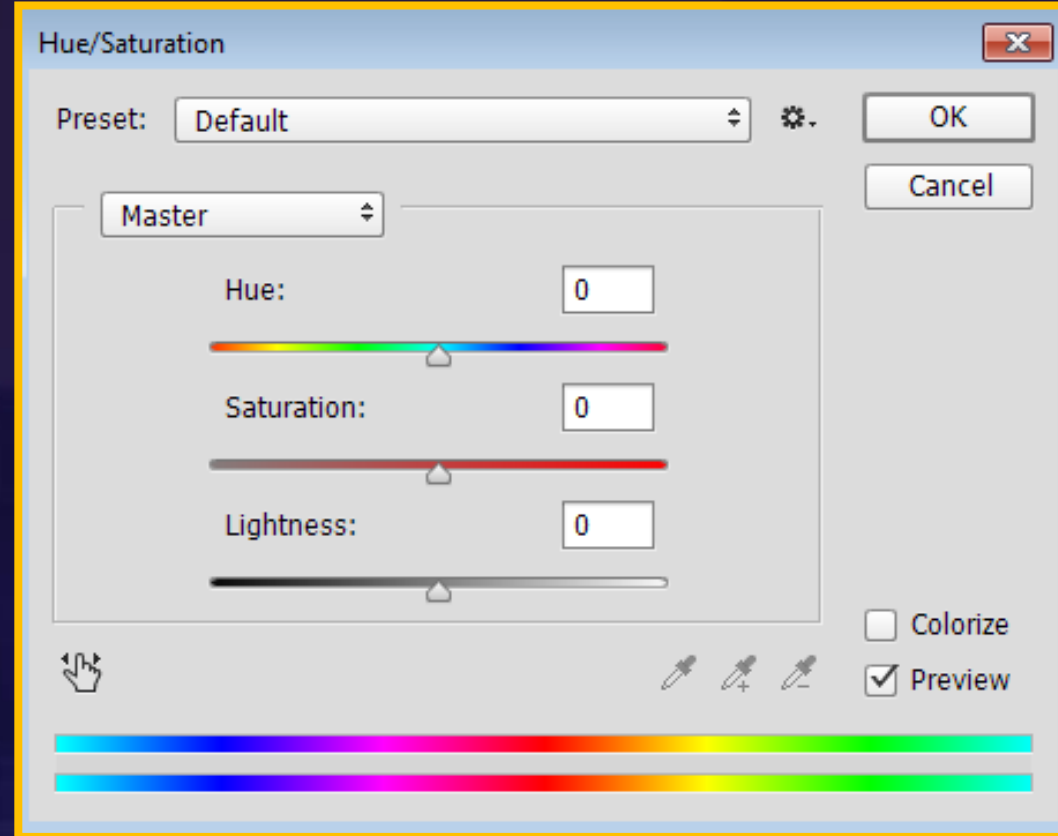
Colour Models: HSB model (or HSL / HSV)



Each color is described as a combination of **Hue**, **Saturation** and **Brightness** values which allows for quick and intuitive color choices.



Colour Models: HSB model (or HSL / HSV)

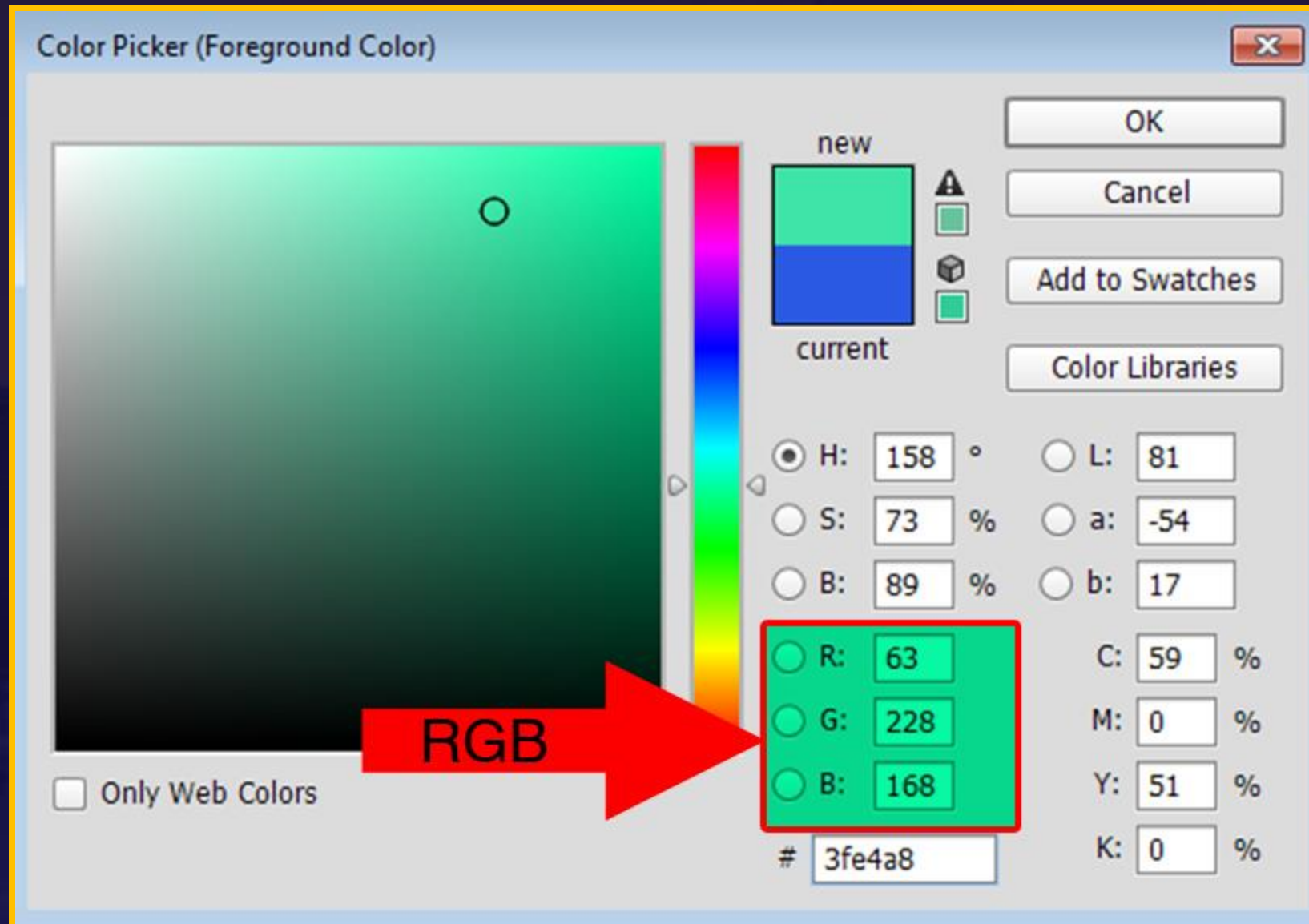


For example, in HSB model, making an orange color **brighter or darker** is a matter of playing with the **Brightness** slider.



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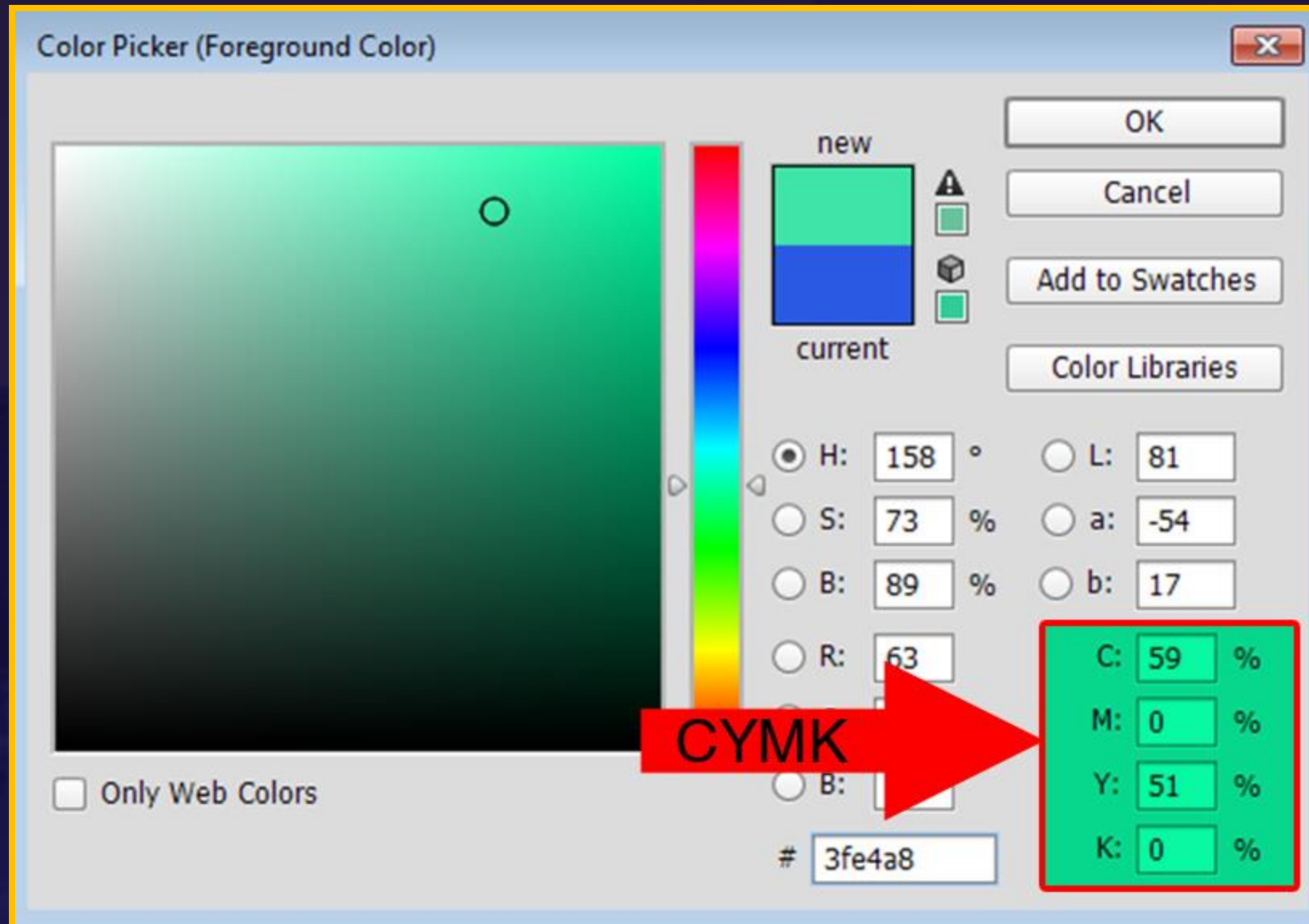
Colour Theory





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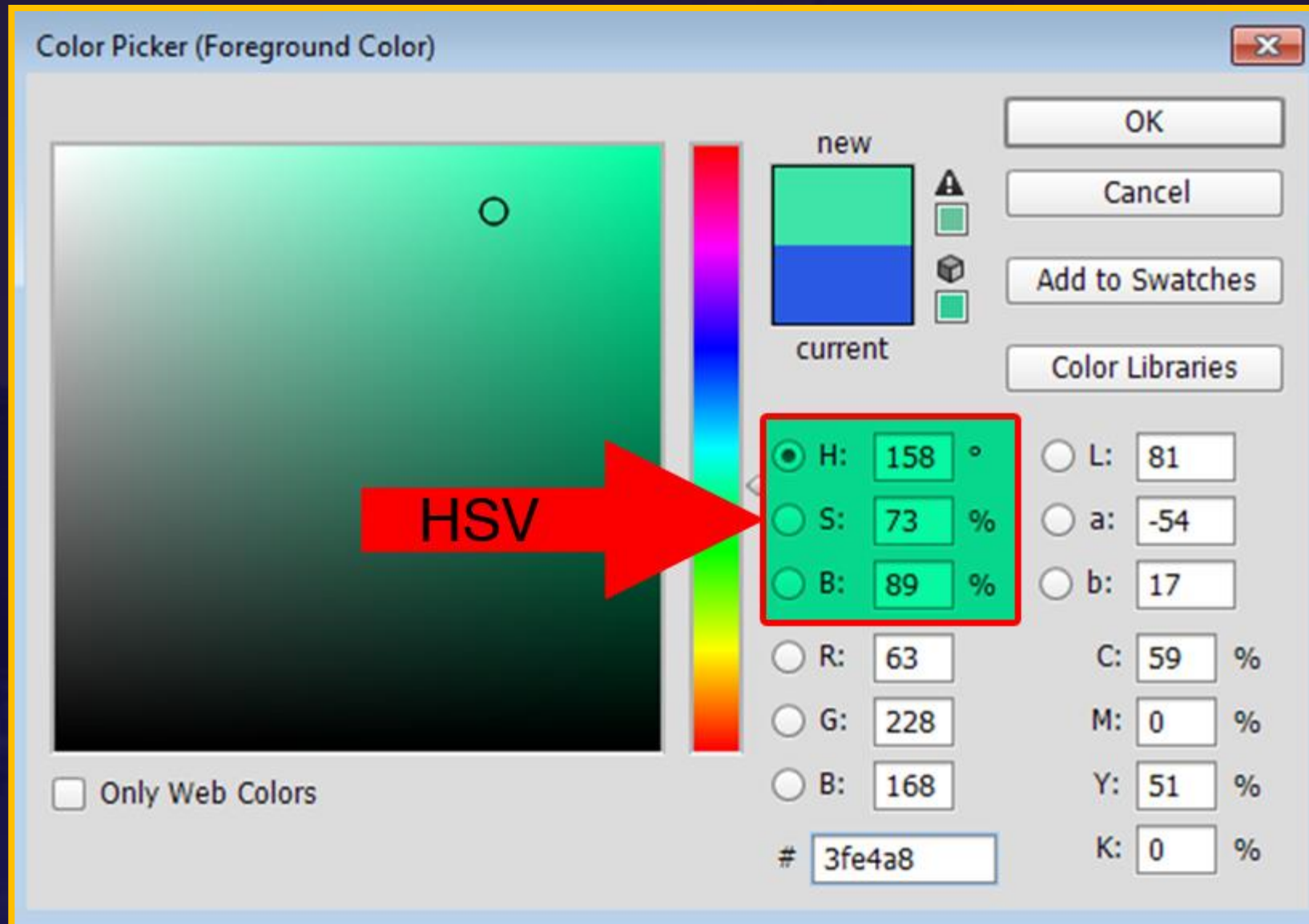
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Any Questions?



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Accessed 22 Oct 2015



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