## Colour Theory



## Complementing and Contrasting Balancing and Dancing

## Traditional Colour Theory



Sir Isaac Newton demonstrated that white light divides into various colours after passing through a prism.

He then created the first colour wheel which made sense of what artists and painters already intuitively and experimentally knew, that primary colours can be mixed to produce secondary or complementary colours.

Other artists and thinkers developed these ideas further and introduced a wide variety of concepts like simlutaneous contrast, tonal constrast, analogous colours, triadic colours, hue, tone, tint and shade.


| 1. Primary Colours: | Red, Yellow, Blue |
| :--- | :--- |
| 2. Complementary Colours: | Green, Orange, Purple |
| 3. Tertiary Colours: | Vermillion, Magenta, Violet, <br> Teal, Chartreuse, Amber |

## The Bedroom

Vincent Van Gogh
(30 March 1853-29 July 1890)

Van Gogh became one of the most famous and influential artists in Western art. He was deeply influenced by the colour theory of his day and was fascinated with complementary colours and the vibrancy this brought to a painting.

This is a painting of Van Gogh's room in Arles, France where he was staying. It has been re-touched as original colours have faded.

Notice:

1. Yellow bed frame and chairs - Purple walls
2. Green chair cushions - Red bedspread
3. Orange table - Blue articles on the table
4. Red floor - Green lines


## Vincent Van Gogh

## Digital Colour Theory

With the invention of photography and videography, and then the advent of television and digital screens, a new way of understanding and applying colour developed.

Three colours were found that could produce many other colours when mixed in different proportions; Red, Green and Blue.

As these colours were produced by displaying light from a light source onto a dark media, this process became known as the Additive Colour Model.

In contrast, digital printing involved applying layers of colour to a white reflective media, thus taking away from the white reflective quality of the media. This process became known as the Subtractive Colour Model. Four colours were needed to create a wide spectrum of colour; Cyan, Magenta, Yellow, and Black.


RGB:
Red, Green, Blue


CMYK:
Cyan, Magenta, Yellow, Black

## The Library




