

# John Ericson's Digital Presentations

Stimulating talks presented with style and humour.....

## A Lecture or part of a Day of Special Interest The Fascinating World of Colour and how we see it!

This lecture is built around a series of fundamental questions about colour and how we are able see it!

Our appreciation of colour is at very core of our common interest in art and the arts but .....

### What is colour?

This is not as simple as it seems. Is it the object itself that has colour, a banana is yellow because it is 'yellow'? Or is colour something that only exists inside our heads?



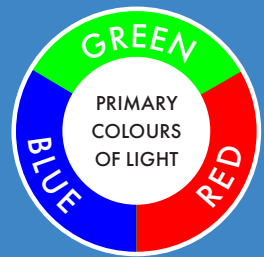
Consider for a moment how dull our lives would be without colour, if everything that we can see was merely in shades of grey.



### What do we mean by Primary Colours?



### Confusingly there are two sets of Primary Colours!



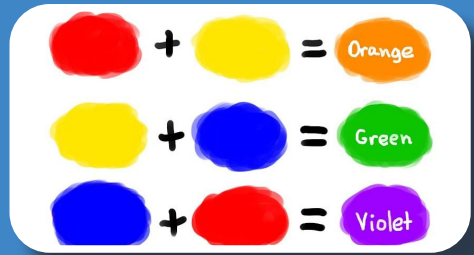
What are the Primary Colours and where do they come from?

They come from nature and the breakdown of white light into its constituent colours.

But here is the great **ANOMOLY** of colour in art.

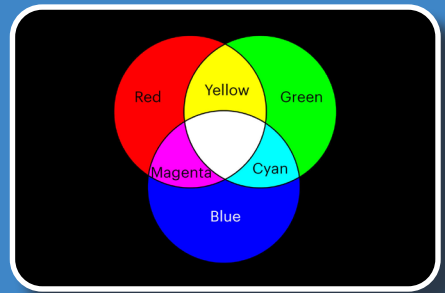
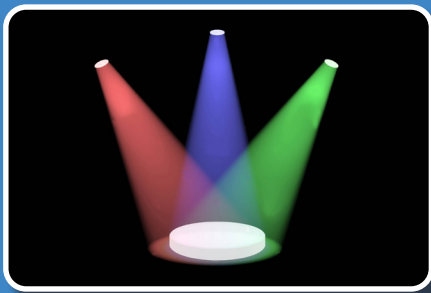
All the paintings ever created have been made with just three Primary Colours - red, blue and yellow but the system by which we see those paintings uses the Primary Colours of Light - red, blue and **GREEN!**

## Mixing the Primary Colours of Paint



When we mix paints or pigments the resulting colour is darker but when we mix coloured lights the resulting colour is lighter.

## Mixing the Primary Colours of Light



When Red and Green light are mixed they produce YELLOW!

### How do we see colour?

For us to see colour we need **light**, an **object** and our **visual system**.

We see colours because our eyes contain thousands of receptors that are sensitive to different wavelengths of light, which our brains are able to perceive and interpret as colours.



### Do we all see the same colour?

#### What is a colour scheme?

A colour palette or scheme is a collection of colours and shades used to achieve unity. It is used in interior design, fashion and elsewhere.

#### Why are some people colour blind?

The term colour blind is not very helpful because only one in a million people sees only shades of grey. A better term is **colour deficient** which better describes this very common condition where some colours are confused with others, for example red and green or not seen at all as in the case of pink and grey.