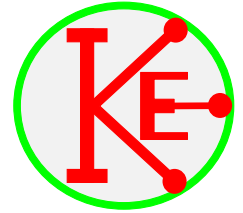


## 13 Colour 2



### EQUIPMENT

- Laptops or tablets
- [http://www.ikes.16mb.com/STEM/13Colour1/colour\\_mixer.htm](http://www.ikes.16mb.com/STEM/13Colour1/colour_mixer.htm)
- Response sheets

### RISKS

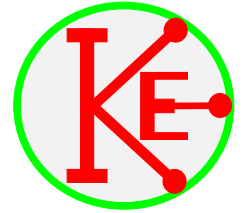
Damage to computers - ensure safely secured.

Uncontrolled access to internet - should be OK on a school network

### SESSION

- 1). Reminder.  
Computers and televisions make all colours from just three colours;  
Red, Green, Blue - Primary colours
- 2). With computers and televisions:-  
each colour can have a value between 0 and 255  
the light is **ADDED** together - **COLOUR ADDITION**  
combinations of these can produce up to 16.8 million different colours.
- 3). Painting and printing relies on **SUBTRACTING** colours from white (usually).  
The Primary colours for paint / ink are :-  
Magenta (Red + Blue), Yellow (Red + Green) and Cyan (Green + Blue)
- 4). E.G. White paper reflects Red, Green and Blue light.  
Painting Cyan onto white paper makes the paper reflect Blue and Green light and absorbs the red light  
Painting Yellow over the top of the Cyan, removes the Blue light leaving only Green
- 5). Students experiment with Colour mixer:-  
firstly with addition - and then try to match the colours with crayons and pens  
secondly with subtraction and again try to match the colours with crayons and pens

NAME: .....

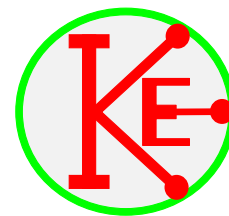


## Colour Addition

The minimum value for any colour is 0 and the maximum is 255

RED	GREEN	BLUE	Colour - description	Colour
255	255	0		
255	255	255		
0	0	0		
0	255	255		
255	0	255		
255	165	0		
255	215	0		
128	128	128		
245	245	220		
0	0	128		
TRY YOUR OWN SET OF COLOUR VALUES				

[www.ikes.16mb.com/STEM/13Colour1/colour\\_mixer.htm](http://www.ikes.16mb.com/STEM/13Colour1/colour_mixer.htm)



## Colour Subtraction

The minimum value for any colour is 0 and the maximum is 255

[illegible]

[www.ikes.16mb.com/STEM/13Colour1/colour\\_mixer.htm](http://www.ikes.16mb.com/STEM/13Colour1/colour_mixer.htm)