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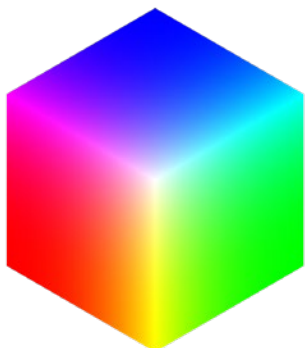
Activity 1: RGB Images

RGB Colour Model

An additive colour model used in computer screens and displays. By adding different combinations of red, green and blue light together in each pixel we can create a large range of colours.

RGB commonly uses an 8 bit per channel of colour system.

2^8 possible shades of blue =256 blue colours



2^8 possible shades of green =256 green colours

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256 x 256 x 256 = 16.8 million different possible colours

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Yellow	3	#FFFF00	255, 255, 0
Grey	4	#808080	128, 128, 128
Orange	5	#FFA500	255, 165, 0
Brown	6	#8B4513	139, 69, 19
Dark blue	7	#0000FF	0, 0, 255
Sky Blue	8	#00BFFF	0, 191, 255
Green	9	#008000	0, 128, 0
Purple	10	#8A2BE2	138, 43, 226

8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	3	3	3	3
8	8	8	8	8	8	8	8	8	8	8	8	8	8	3	8	3	3	3
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7	7	7	7	3	3	3	3	3	3	3	3	3	3	3	3	7	7	7	7
7	7	7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	7	7	7

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Activity 2: RGB Images

RGB Colour Model

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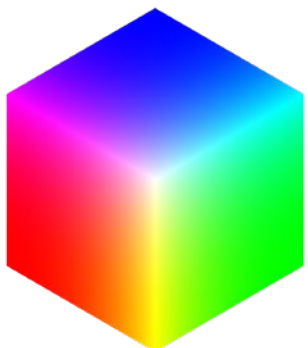
2^8 possible shades of blue =256 blue colours



2^8 possible shades of green =256 green colours

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256 x 256 x 256 = 16.8 million different possible colours

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						6	6	6	6	6	6	6	6	6	6				
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																			5
											6	6	5	5	5	5	5	5	5

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Activity 3: RGB Images

RGB Colour Model

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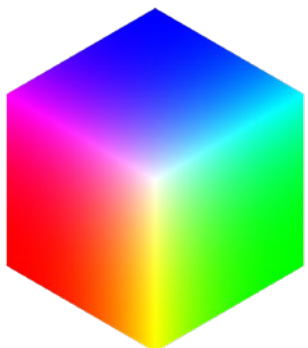

2^8 possible shades of green =256 green colours

2^8 possible shades of red =256 red colours

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			6	6									6	6					
		6			6							6			6				
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			6	6	6	6	1	1	1	6	6	6	6			4	4	4	
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		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	

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Activity 4: RGB Images

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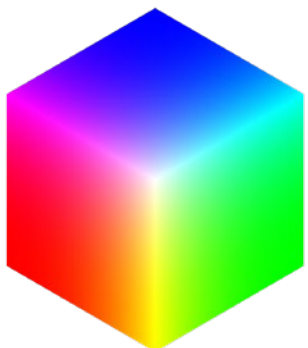

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8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	3	3	3	3	3
8	8	8	6	6	8	8	8	8	8	8	8	8	6	6	8	8	3	3	3
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9	9	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	9
9	9	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	9

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Activity 5: RGB Images

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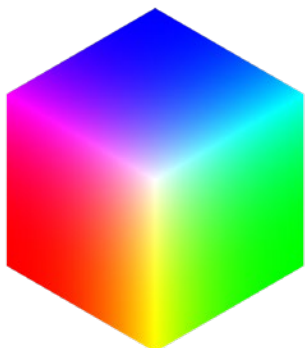

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													6		6			
													6	6	6	6		
												6	6	0	0	6	6	
	6											6	0	1	0	0	6	6
6	0	6										6	0	0	0	0	6	6
6	0	6										6	0	0	0	6	6	
6	0	6										8	10	0	6			
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6	6	6	6	6	6	6	6	6	6	6	6	6	8	10	6			
	6	6	0	0	0	0	0	0	0	0	0	0	0	8	10	10	8	
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		6	0	0	0	0	0	0	0	0	0	0	0	0	6			
		6	0	0	0	0	0	0	0	0	0	0	0	6	6			
		6	0	6	6	6	6	6	6	6	6	0	6					
		6	0	6	0	6			6	0	6	0	6					
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Images: RGB Cube [Image] (n.d.). Retrieved from https://commons.wikimedia.org/wiki/File:RGB_Colorcube_Corner_White.png Images: Vectors from www.freepik.com

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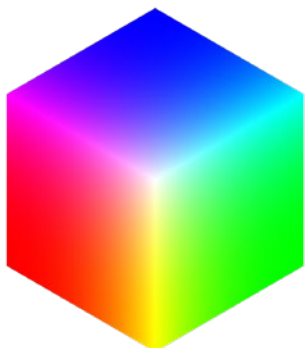

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8	6	8	8	8	8	8	8	8	8	8	8	6	0	1	0	0	6	6	8
6	0	6	8	8	8	8	8	8	8	8	8	6	0	0	0	0	6	6	8
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