

<http://www.colourblindawareness.org/colour-blindness/types-of-colour-blindness/>

**protanomaly**, which is a reduced sensitivity to red light,

**deuteranomaly** which is a reduced sensitivity to green light

**tritanomaly** which is a reduced sensitivity to blue

deuteranomaly and protanomaly are collectively known as red-green colour blind and they generally have difficulty distinguishing between reds, greens, browns and oranges. They also commonly confuse different types of blue and purple hues.

reduced blue sensitivity have difficulty identifying differences between blue and yellow, violet and red and blue and green. To these people the world appears as generally red, pink, black, white, grey and turquoise.

### **Protanopia**

Protanopes are more likely to confuse:-

1. Black with many shades of red
2. Dark brown with dark green, dark orange and dark red
2. Some blues with some reds, purples and dark pinks
3. Mid-greens with some oranges

### **Deuteranopes**

Deuteranopes are more likely to confuse:-

1. Mid-reds with mid-greens
2. Blue-greens with grey and mid-pinks
3. Bright greens with yellows
4. Pale pinks with light grey
5. Mid-reds with mid-brown
6. Light blues with lilac

### **Tritanopes**

The most common colour confusions for tritanopes are light blues with greys, dark purples with black, mid-greens with blues and oranges with reds.

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## Monochromacy (achromatopsia)

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**Normal Vision**



**Monochromacy**

People with monochromatic vision can see no colour at all and their world consists of different shades of grey ranging from black to white, rather like only seeing the world on an old black and white television set.