## Colour Deficient Visioning

In the following you will get an overview of the possible ways of people's visioning:

**Trichromat -** sees using all three colours (red/green/blue)

Anomalous trichromat - reception of one pigment is misaligned (anomalous).

Dichromat - only 2 of the 3 visual pigments exist - red, green or blue is missing.

There are different forms of this phenomena occurring, because just 2 cones are acting correctly.

- Red blindness says, that red is not perceived. A mix up of colours will be the result. red seems to be yellow, brown is recognised as green, violet and blue as well as dark-red with black
- Green blindness says, that green is not recognised. In this case all colour mistakes as redblind people have apply, except the dark-red black confusion.
- Blue blindness says, that blue is not perceived. This phenomena is very seldom. Red and orange, blue and green, as well as yellow-greenish with grey is mixed up

Protanomaly - reduced red sensitivity in an anomalous trichromat

Deuteranomaly - reduced green sensitivity in an anomalous trichromat

Protanopia - unable to receive first colour (red)

Deuteranopia - unable to receive second colour (green)

Tritanopia - unable to receive third colour (blue)

Protanope and Deuteranope are called the red-green blind.