



Visual Perception

<https://pixnio.com/people/female-women/eye-gorgeous-fashion-portrait-woman-cute-face-eyes-blond-attractive>



Learning Goals

- The human eye
- Sensory perception
- Stereoscopic vision

Color perception

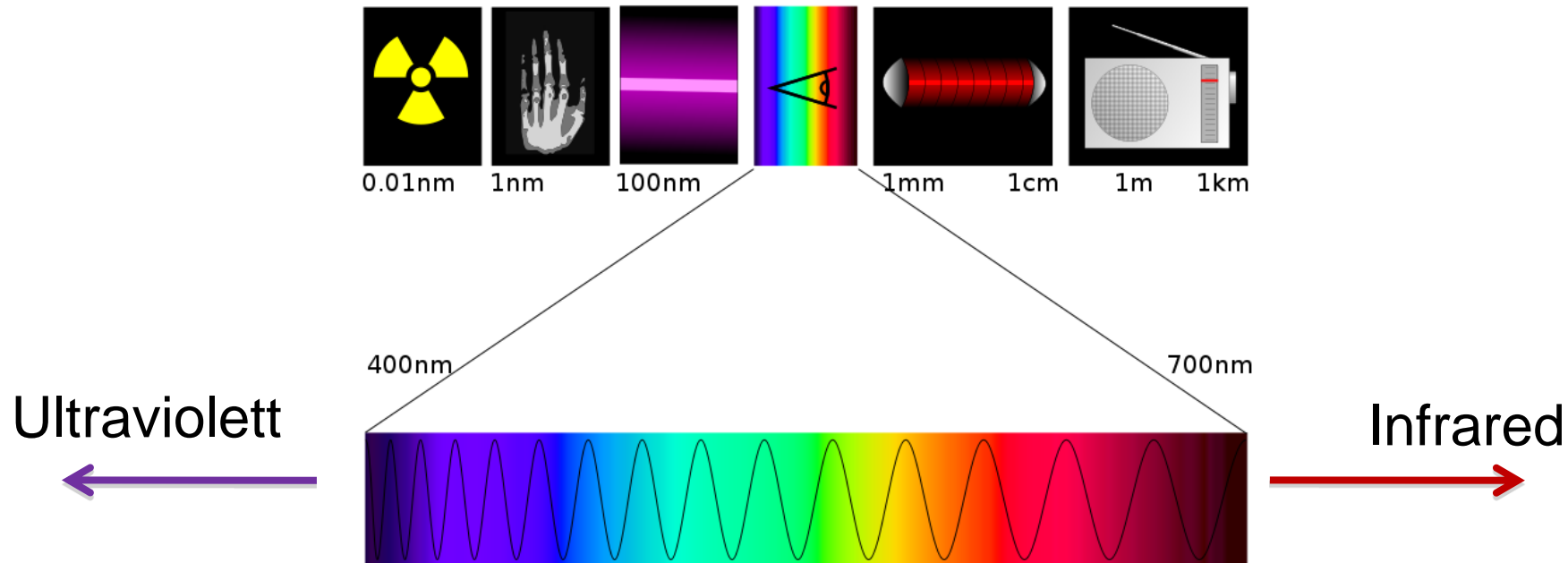


Image Source <https://commons.wikimedia.org/wiki/File:Spectre.svg> by Tatoute and Phrood

Light perception

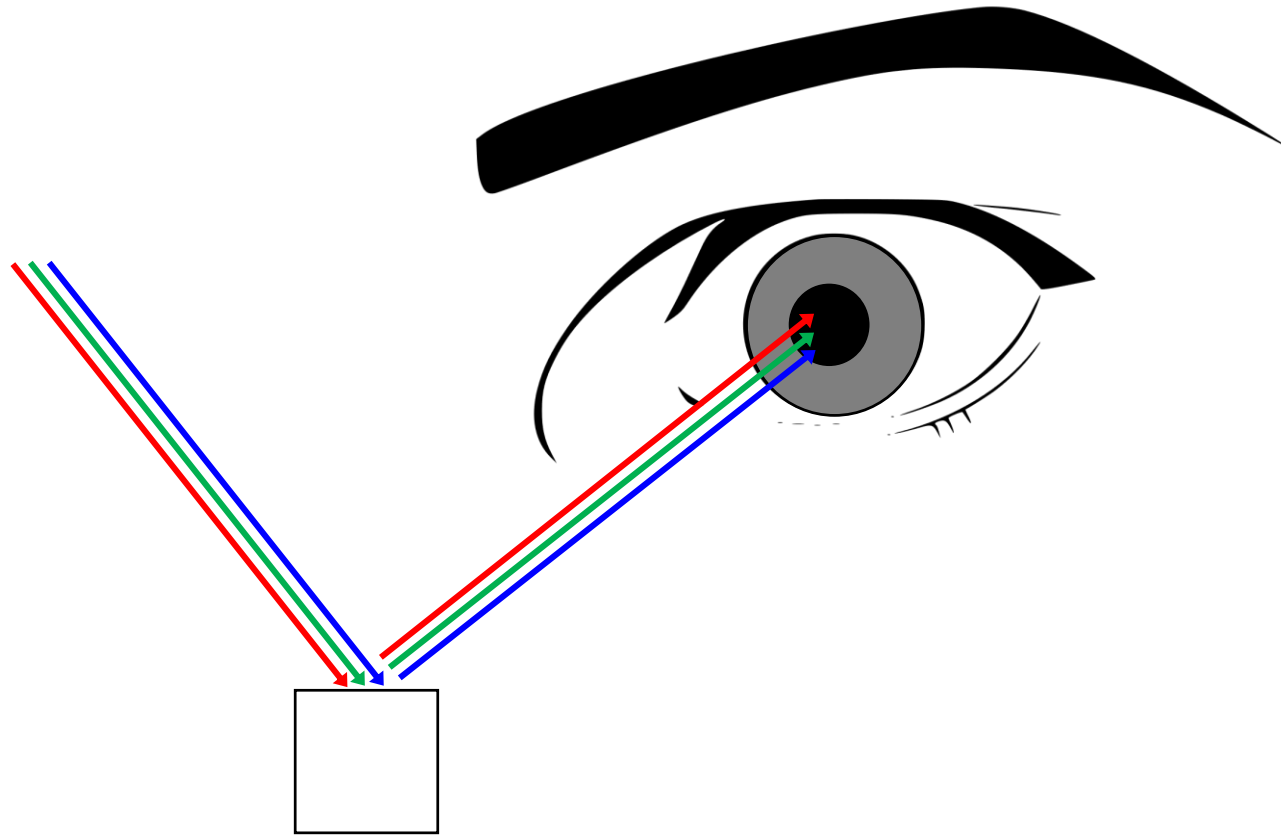


Image Source <https://svgsilh.com/image/149670.html>

Light perception

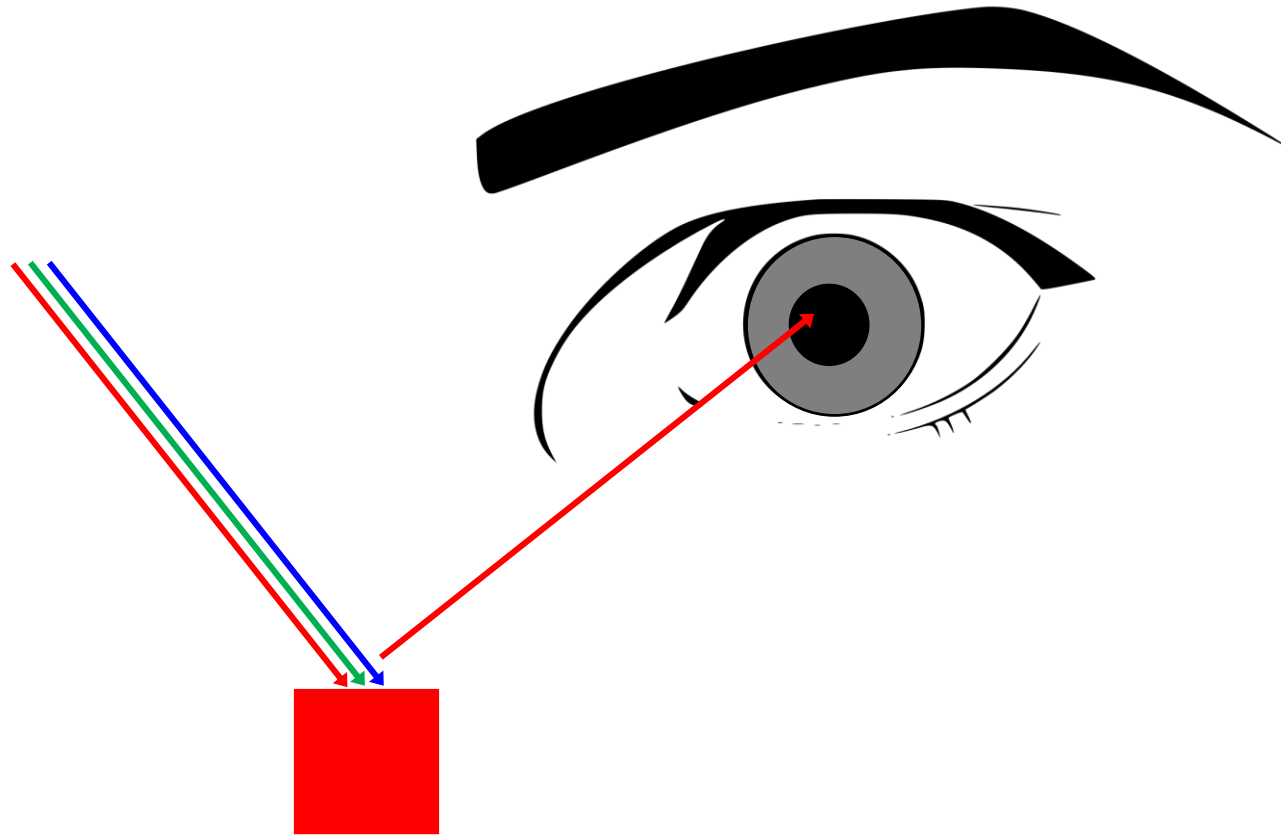


Image Source <https://svgsilh.com/image/149670.html>

Light perception

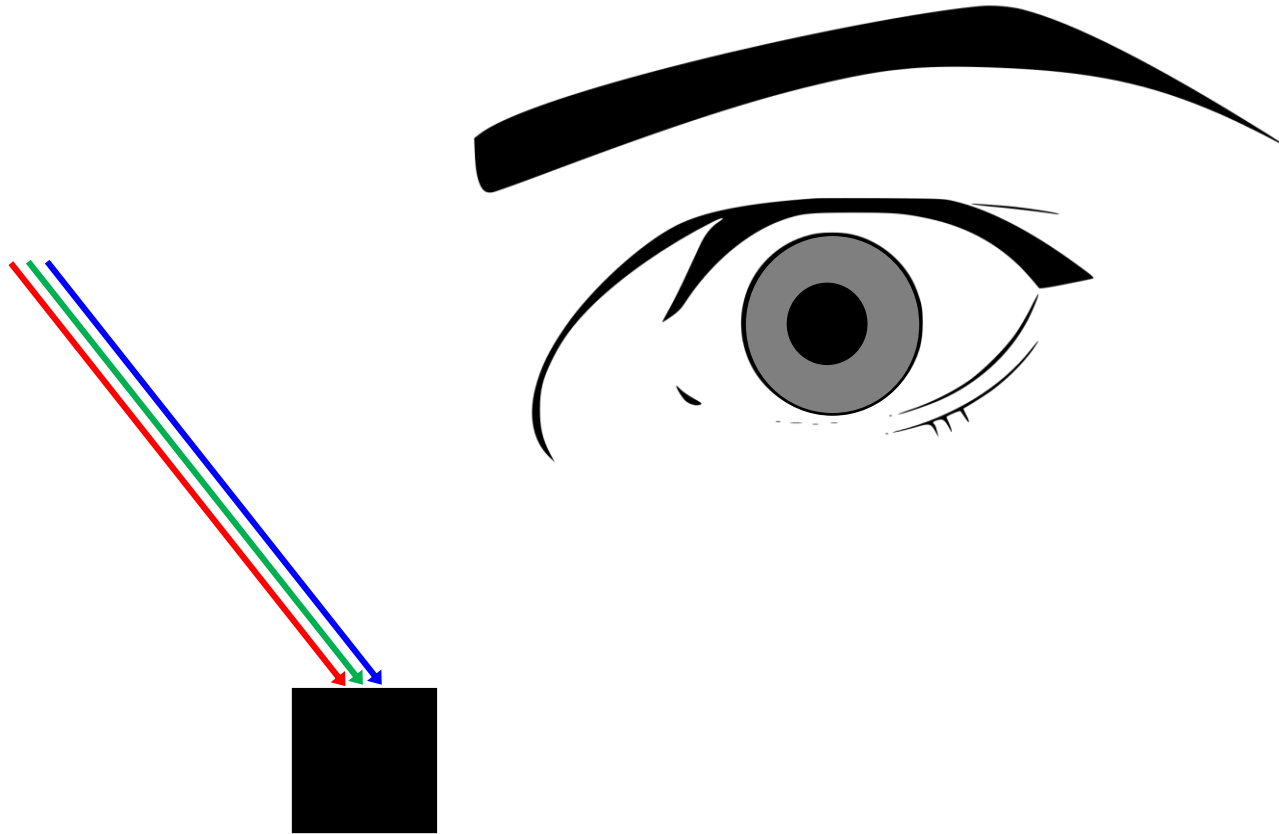


Image Source <https://svgsilh.com/image/149670.html>



Image Source <https://www.flickr.com/photos/orazal/26664008746/> by Anthony Lazaro

Light perception

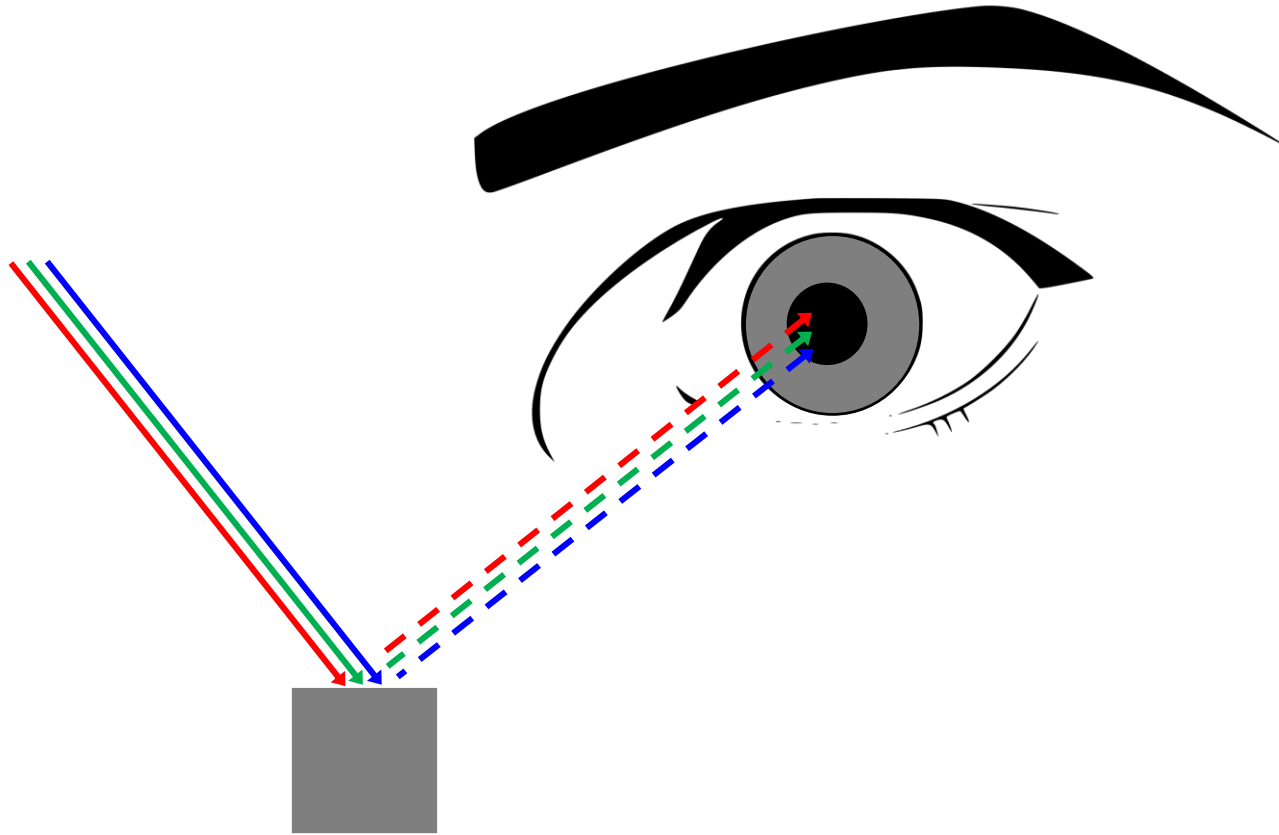


Image Source <https://svgsilh.com/image/149670.html>

Light perception

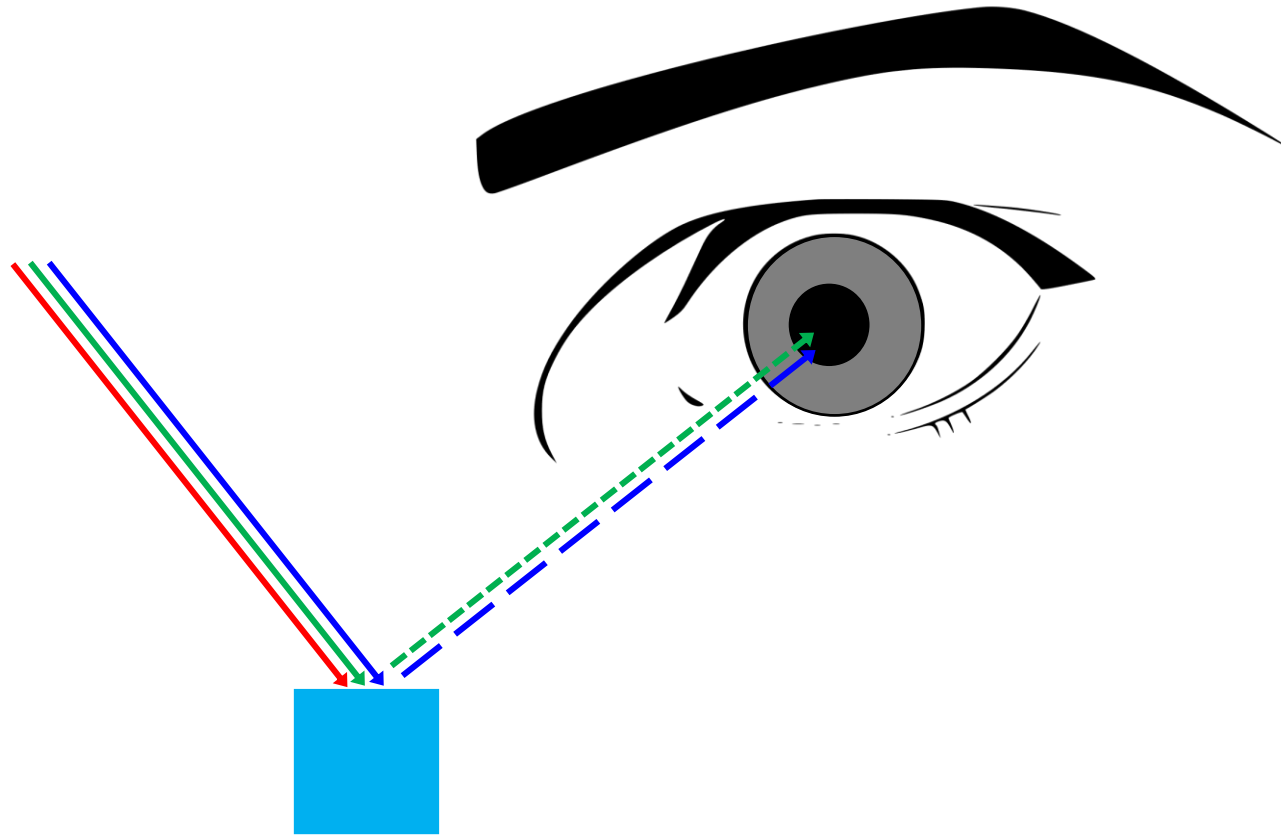


Image Source <https://svgsilh.com/image/149670.html>

The eye

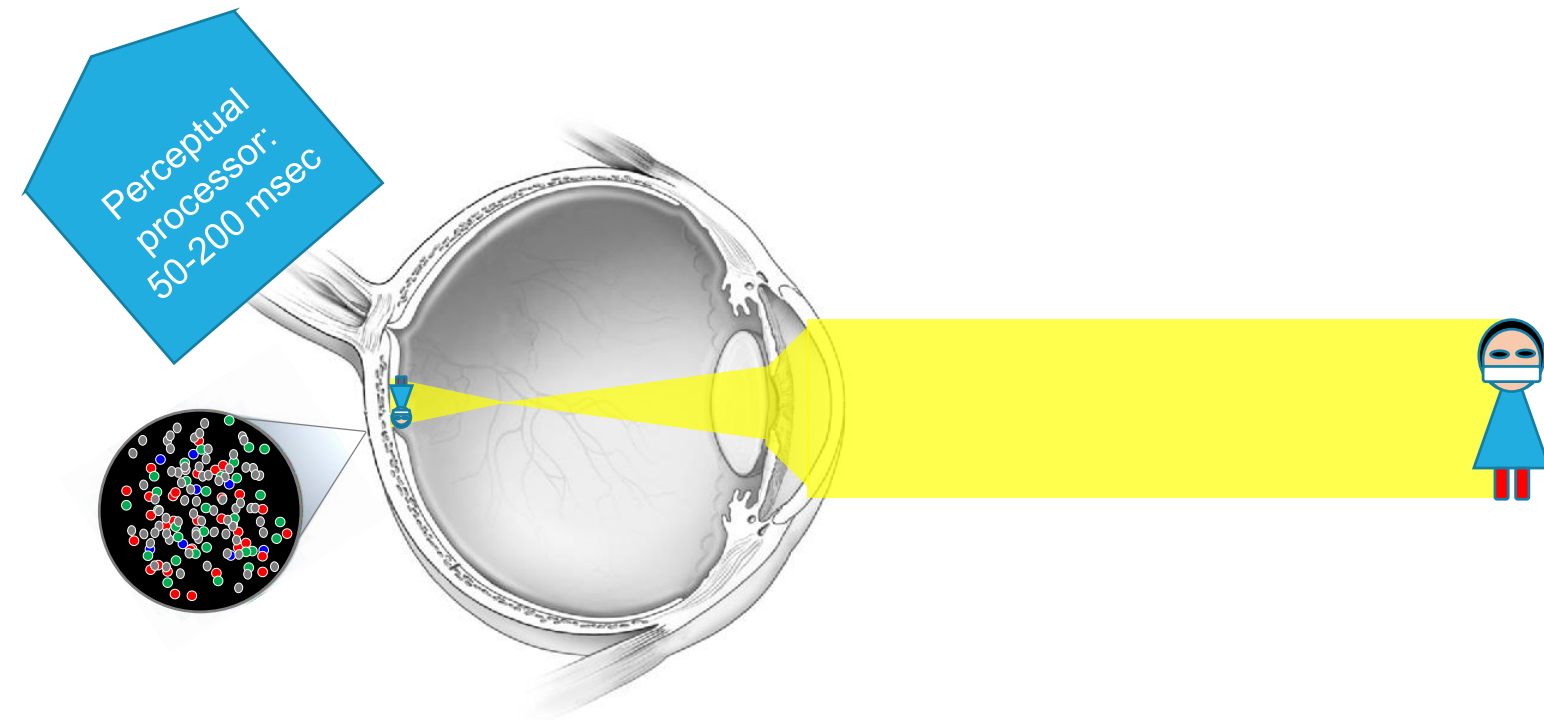


Image Source <https://www.flickr.com/photos/nationaleyeinstitute/7544457228> by National Eye Institute



Image Source https://en.wikipedia.org/wiki/Eadweard_Muybridge animated using photos by Eadweard Muybridge

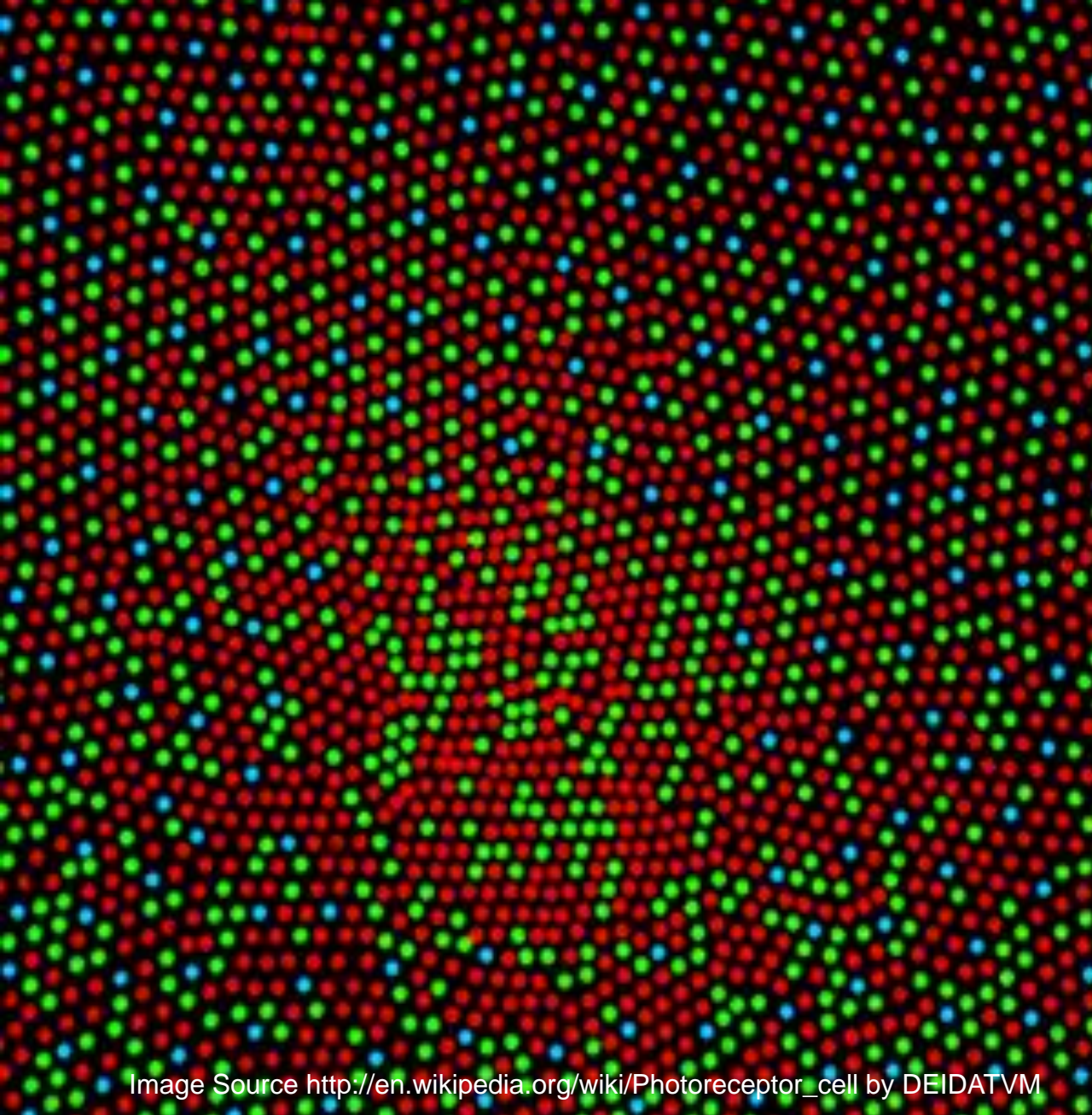


Image Source http://en.wikipedia.org/wiki/Photoreceptor_cell by DEIDATVM

Color perception



- 10% of males & 1% of females are red/green blind (see 17)
- Rest sees 47

Image Source <https://de.wikipedia.org/wiki/Datei:47-rg12.jpg> by Liftarn



Image Source <http://resumbrae.com/ub/dms423/21/>

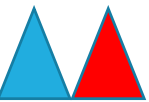
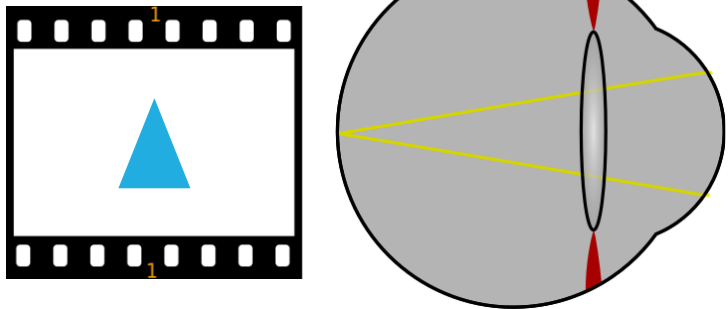
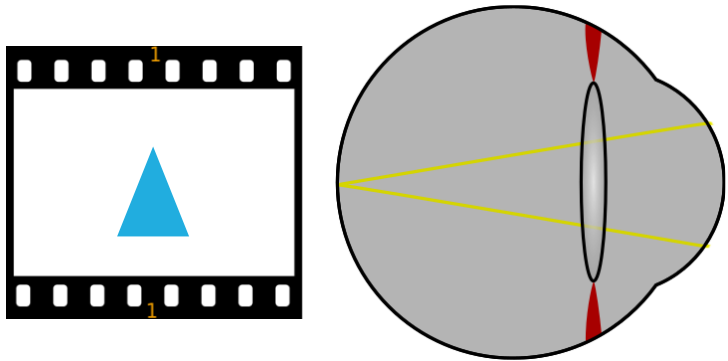


Image after https://de.wikipedia.org/wiki/Datei:Focus_in_an_eye.svg by AzaToth & https://commons.wikimedia.org/wiki/File:Film_strip.svg by Nevit

Vergence & accommodation

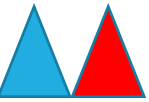
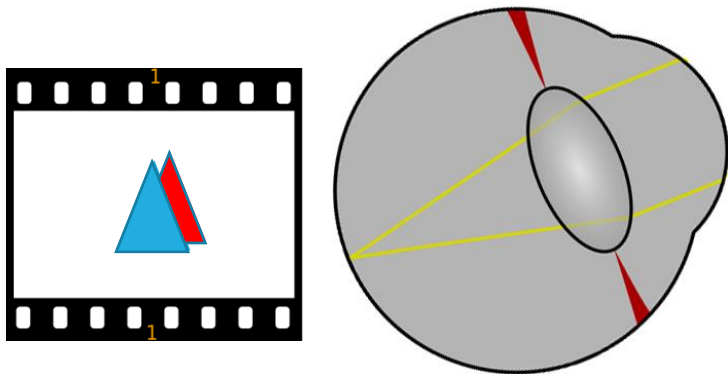
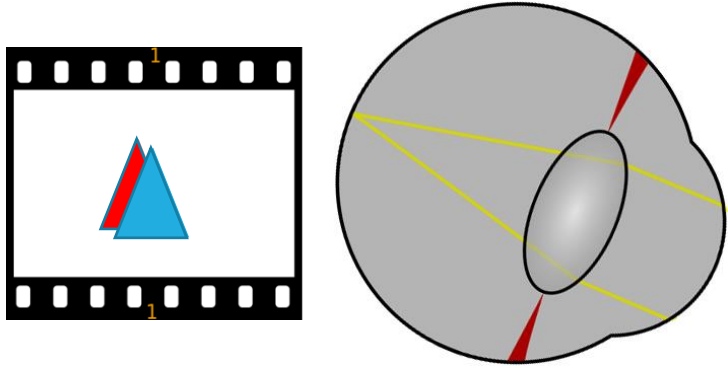


Image after https://de.wikipedia.org/wiki/Datei:Focus_in_an_eye.svg by AzaToth & https://commons.wikimedia.org/wiki/File:Film_strip.svg by Nevit



- Vision adaptive to light
- Good resolution and color in central area
- Good motion perception in the periphery & dark
- Best contrast perception in red/green
- Limited temporal resolution (reaction speed)
- Perception of 2 images, one per eye

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