


Chapter 4(a) Sensation

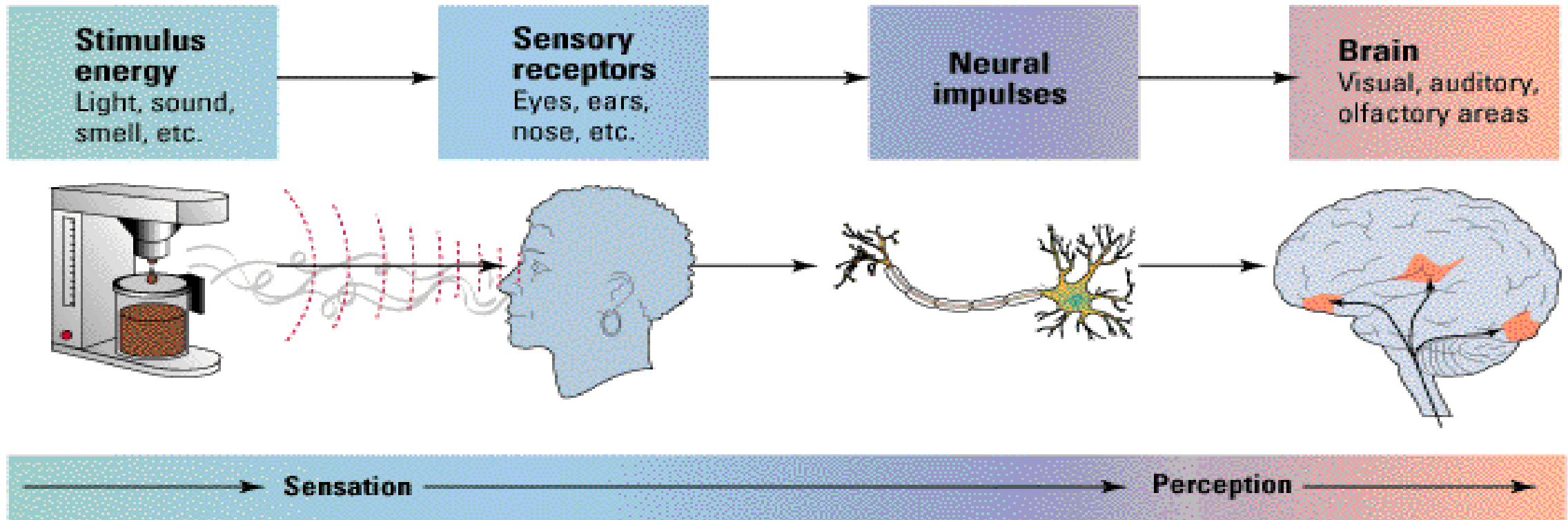
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- In psychology, sensation are stages of processing of the senses in human and animal systems, such as vision, auditory, vestibular, and pain senses.
 - Sensation Is the processes by which our sense organs receive information from the environment.

SENSATION

feeling, the result of messages from the body's sensory receptors registering in the brain as information about the environment of simply, sensation is a process of accepting the stimulus by the sense

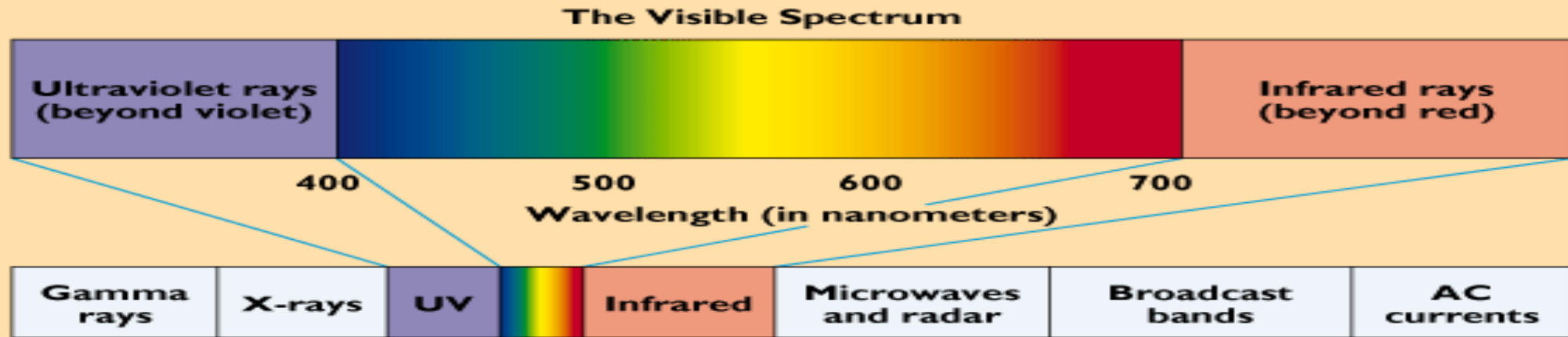
Sensation Processes



VISION

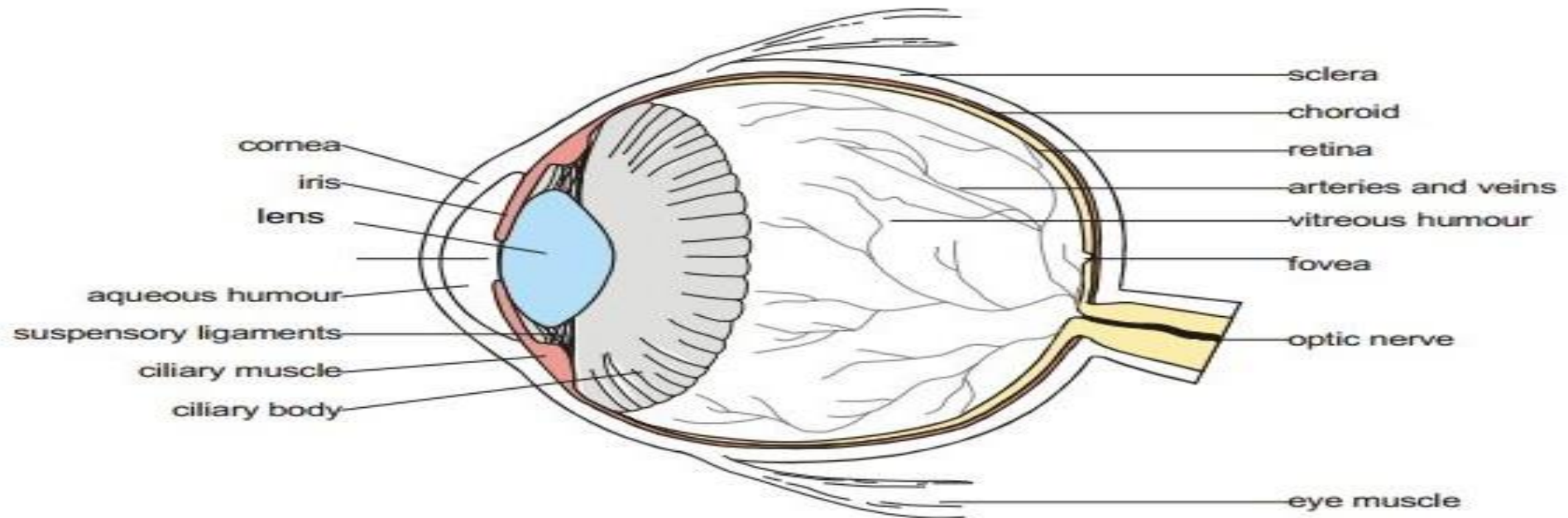
► The Electromagnetic Spectrum

People can perceive only a small part of the total electromagnetic spectrum.



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THE STRUCTURE OF THE EYE



BiologyMad.com

FUNCTION IN EYES

❖ Cornea

> Helps to maintain the shape of the anterior chamber of the eyeball.

❖ Pupil

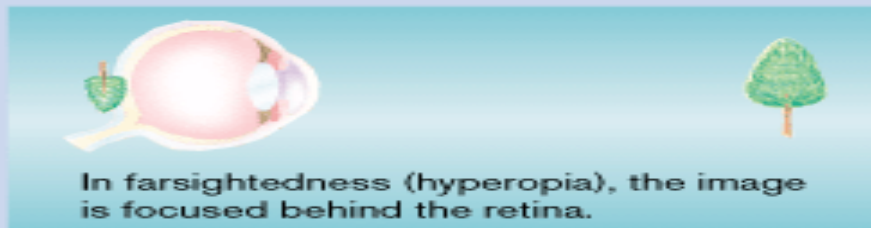
> Is a thin protective covering of epithelial cells. It protects the cornea against damage by friction

❖ Lens

> Is the transparent, curved front of the eye which helps to converge the light rays which enter the eye

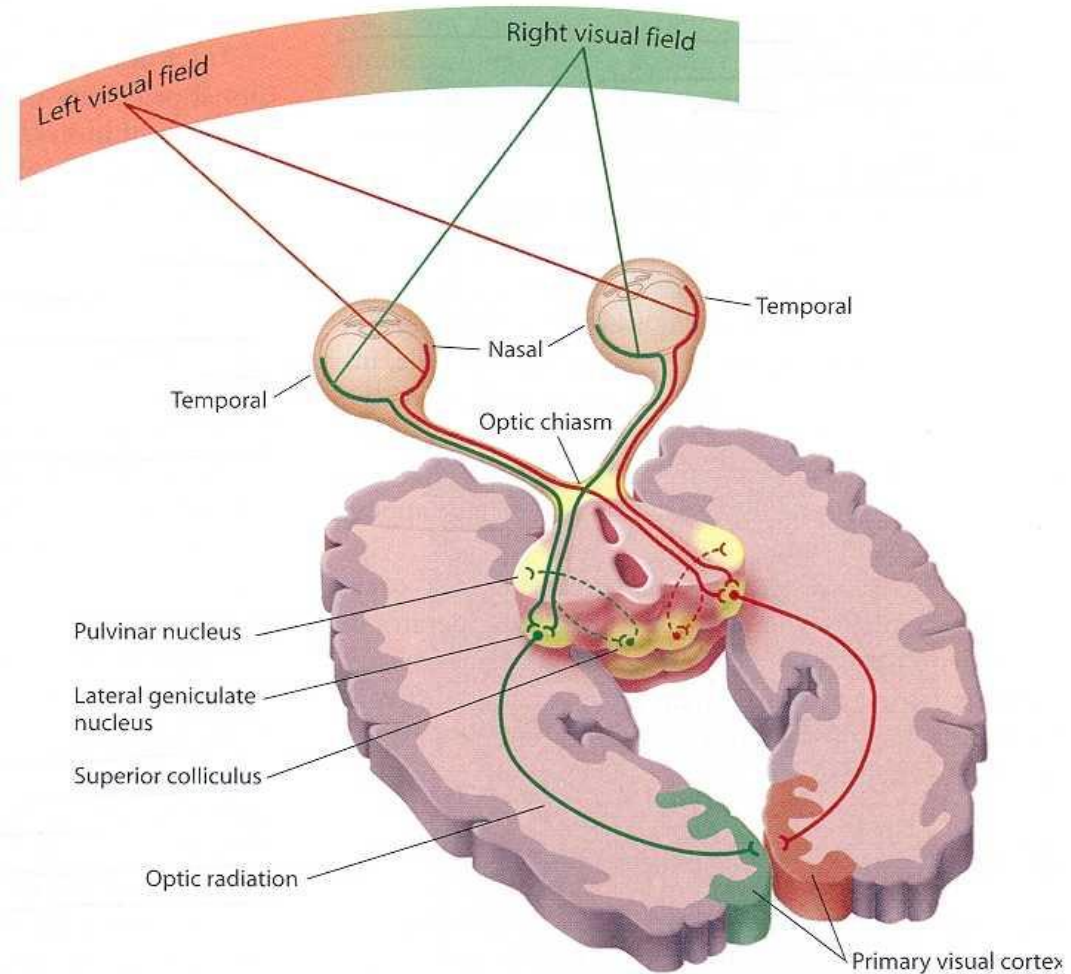
VISION

► Normal Vision, Nearsightedness and Farsightedness



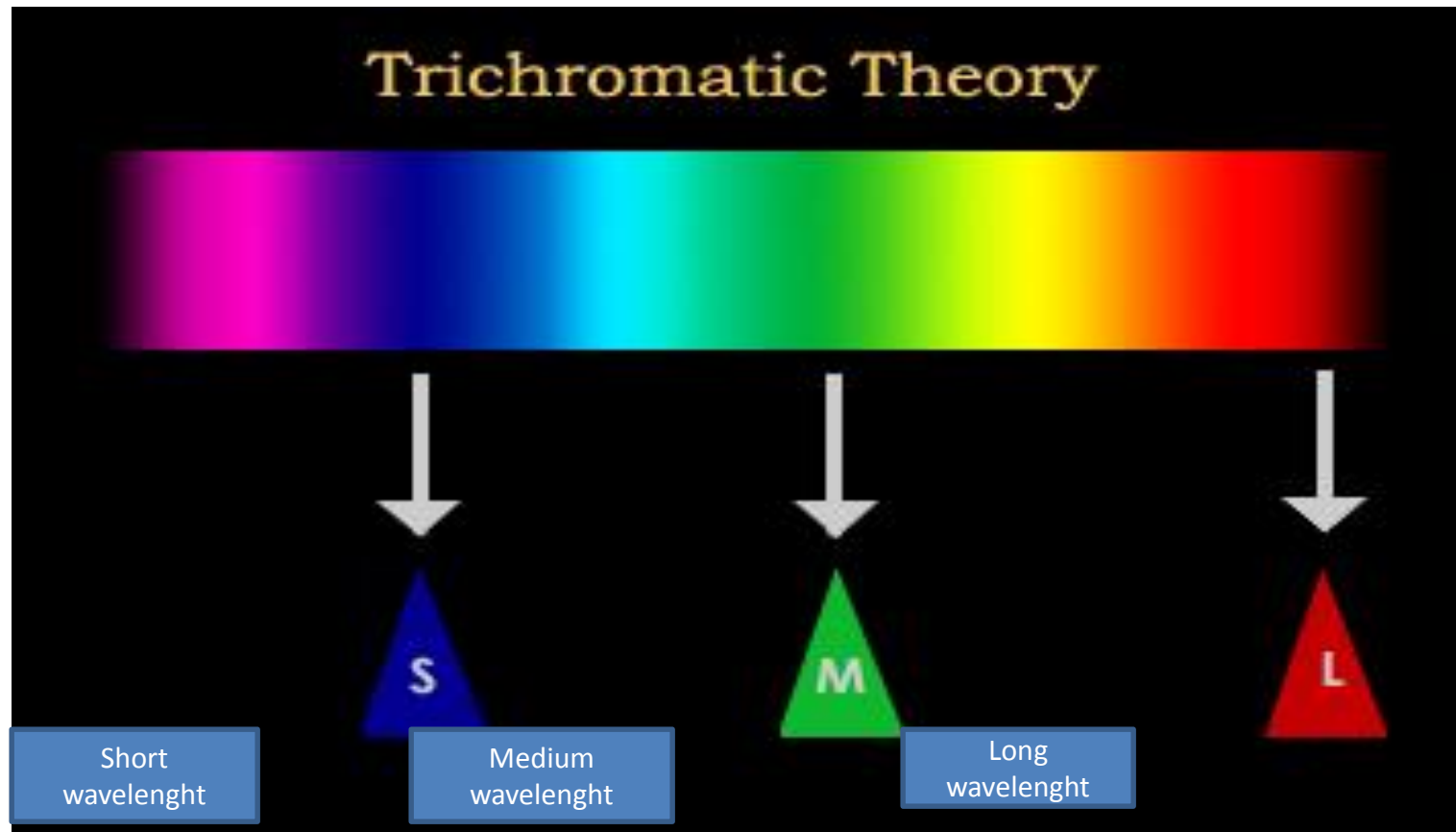
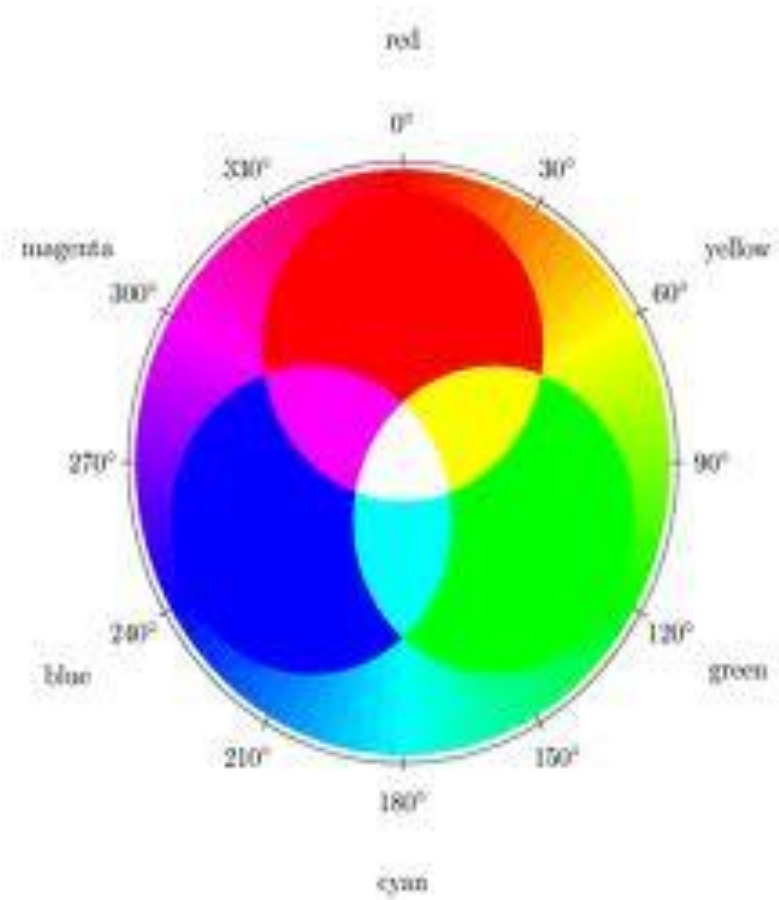
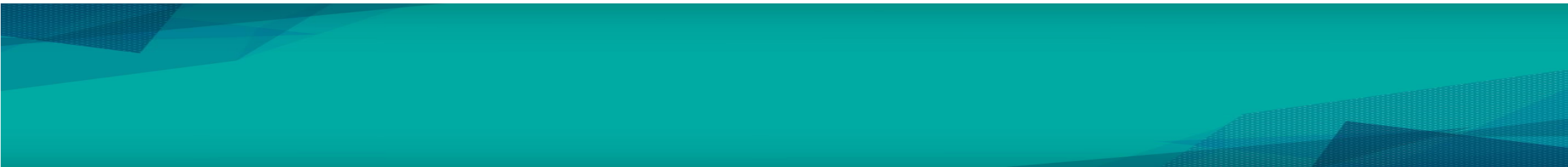
VISUAL PATHWAY IN EYES

- The visual pathway which carries information from eyes to the brain.



TRICHROMATIC THEORY

- Proposed by *Thomas Young(1802)* and *Hermann von Helmholtz(1852)*.
- The theory of color vision suggesting that there are three types of cones, which are maximally sensitive to red, green, or blue, and that varying levels of activity in these receptors can produce all of the colors.



Opponent Process theory

- The opponent-process theory states that the cone photoreceptors are linked together to form three opposing colour pairs: blue/yellow, red/green, and black/white.
- This theory also helps to explain some types of colour vision deficiency. For example, people with dichromatic deficiencies are able to match a test field using only two primaries. Depending on the deficiency they will confuse either red and green or blue and yellow.

Opponent-Process Theory



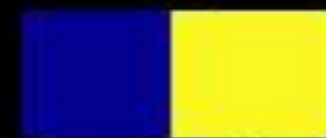
black-white

Achromatic System



red-green

Chromatic System



blue-yellow

Test Colour Deficiency

