The Structure of the Eye

Cornea:

- Transparent
- Convex-shaped
- Protects eye
- Focus light ray onto the retina

Aqueous Humour:

- Maintains shape of eye
- Provides nutrients and O_2
- Carries waste away

Pupil:

- Opening in Iris (black)

Iris:

- Ring of muscles (coloured)
  Changes size of pupil to regulate amount of light entering eye
- Dim light (pupil expands) to allow more light to enter eye
- Bright light (pupil contracts) to restrict amount of light entering eye

Lens:

- Transparent
- Flexible
- Convex structure
- Focuses light onto retina
- Lens shape changes when distance of the object being viewed changes

Ciliary Muscles:

- Attached to each end of lens
- Contact and relax enabling lens to automatically bulge (muscles contract) to focus near objects onto retina, and flatten (muscles relax) to focus distant objects onto retina.

Vitreous Humour:

- Jelly substance
- Helps maintain shape of eye ball
- Has role in focusing

Retina:

- Layers of neural tissue
- Back of eye

Photoreceptors:

- Layer of neurons at very back, innermost part of retina
- Once activated response to light begins
- Cones - Colour, fine detail
- Rods - Night time vision, peripheral vision

Fovea

- Has a high concentration of CONES on the retina. Straight behind the eye

Blind Spot:

- Optic nerve interrupts the retina. NO photoreceptors - NO IMAGE

Characteristics of the Visual Perception System

- Visual perception system refers to the entire network of physiological (physical) structures that we use to see.
- **Structures include:**
  - Eye
  - Receptors and Photoreceptors
  - Nerve pathways