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 \( \text{O}_2 \)
- 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