

# ANATOMY OF THE EYE

## 1. Conjunctiva

- Mucous membrane lining eyelid & covering eyeball.
- Fuses with eyelids; prevents foreign objects getting behind eye.

## 2. Cornea

- Outer, front layer of the eye.
- Focuses incoming light by a fixed amount.

## 3. Sclera

- Opaque outer layer; does not permit light entry.
- Lines border to prevent light from entering

1

## 6. Retina (Furthest Back Layer)

- Region where photoreceptor cells are located.
- **Fovea:** Central region; high concentration of cone cells.
- **Periphery:** Contains rod cells; most sensitive to light.

## 7. Optic Disc

- Point where blood vessels enter and leave the eye.
- Optic nerve exits here, carrying visual info to brain.

## 4. Iris (Colored Part)

- Muscles contract/relax to determine pupil size.
- Regulates light entering eye, optimizing retina's discernment.

**Analogy:** Camera Lens.

## 5. Lens

- Composed of several transparent layers.
- Shape changes to focus on objects at varying distances.

**Accommodation:** The process of the lens adjusting its shape for

**Light Pathway:** Light → Lens → Vitreous Humor (fluid-filled region behind lens).

2

## MOVEMENTS OF THE EYE

Eyes suspended in bony sockets at skull front, called **orbits**.

**Six extraocular muscles** attach to sclera to rotate & hold eye.

### Types of Eye Movements:

- **Saccadic:** Rapid, jerky shifts in gaze from one point to another.
- **Pursuit:** Maintain focus on an object that is moving.

## ORGANIZATION OF THE RETINA

### Visual Information

#### Pathway:

Light detection leads to visual information propagating in this sequence:

**Photoreceptor Cells →**

**Bipolar Cells → Retinal**

**Ganglion Cells → Brain**  
(Note: PORB -

**Photoreceptor, Bipolar, Retinal Ganglion, Brain)**

Light must pass through cell layers (e.g., bipolar, ganglion)

\*before\* reaching

photoreceptor cells where it is