

Focus
Understand
Remember ♥

The eyes are
the windows to
the wonder of
the world. ♥

Chapter 10 —

The Human Eye and the Colourful World

Important
Chapter

Board
Exam Notes

Quick
Revision
Friendly ♥

Light makes
everything
visible...
Knowledge makes
everything
clear. ♥

VIBGYOR

1 Human Eye 👁️ ---->

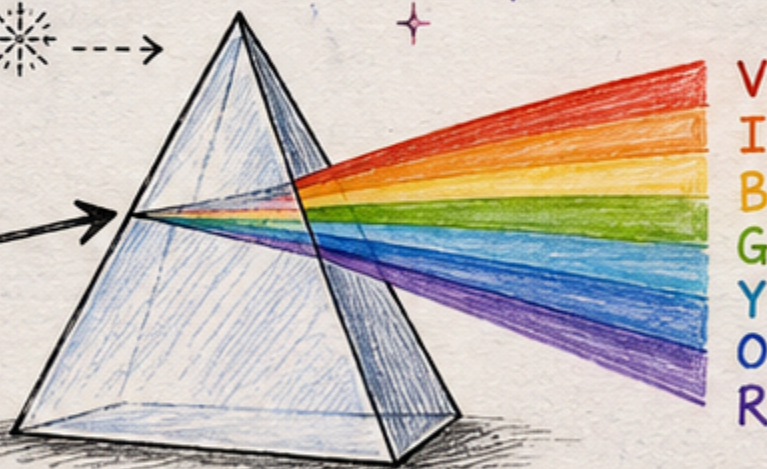
2 Defects of Vision 👓 ---->

3 Prism & Dispersion ▲ ---->

4 Atmospheric Refraction ☁️ ---->

5 Scattering of Light ✨ ---->

White Light



The sky looks blue
due to scattering
of light. The sun
sets red due to
longer path of
sunlight. ★

Nature is full of
colours, all thanks
to light! ♥

@DiagramDidi ✨

10.1

The Human Eye

Overview

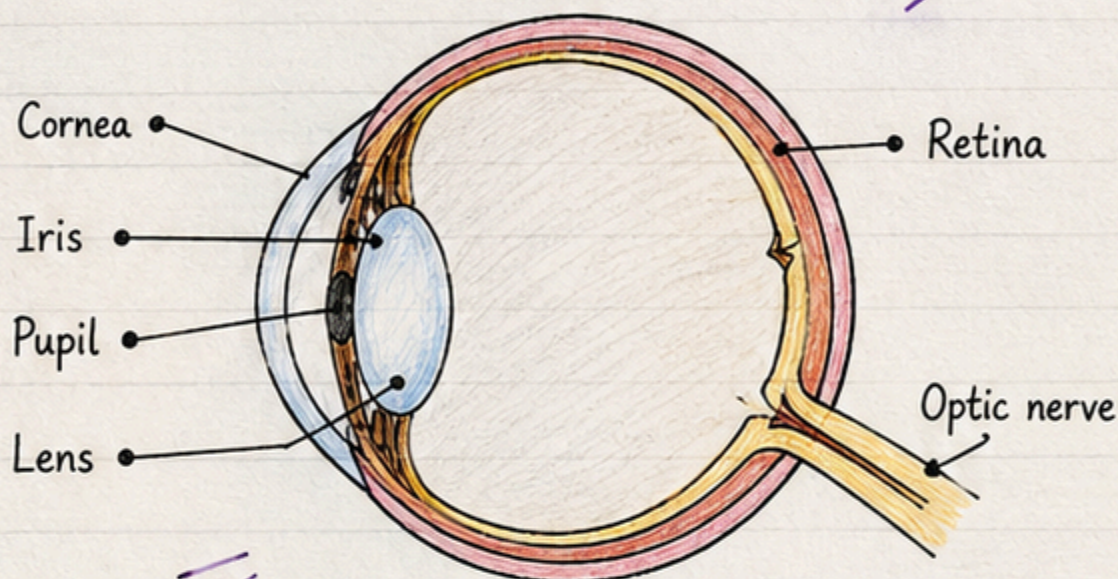


Important Concept

1. Human Eye Overview

- The human eye is a **valuable** and **sensitive** sense organ.
- It helps us to **see** the world around us.
- It **detects light** and sends signals to the brain.

Parts of Human Eye



2. Working Principle

Works like a camera. 

The eye has a lens system. 

The lens system forms the image on the **retina**.

Retina acts like a **light-sensitive screen**. 

3. Main Functions

The eye **receives light** from objects. 

It **focuses the light** using its lens system. 

It forms a real, inverted **image** on the retina. 

Retina detects the image and **sends signals** to the brain. 

Quick Revision

“Eye works similar to a camera.” 





Parts of the Human Eye



1. Cornea ✨

- Transparent, thin outermost layer.
- Protects the eye from dust and germs.
- Helps in focusing light.



2. Eyeball 👁

- Almost spherical in shape.
- Gives the eye its structure.
- All parts of the eye are enclosed within it.



5. Pupil ●

- Black circular opening in the center of iris.
- Allows light to enter the eye.



6. Retina 📄

- Light-sensitive layer at the back of eye.
- Contains millions of photoreceptor cells.
- Forms real, inverted image.



7. Optic Nerve 🌿

- Thick bundle of nerve fibers.
- Carries electrical signals from retina to brain.
- Helps in seeing and understanding images.



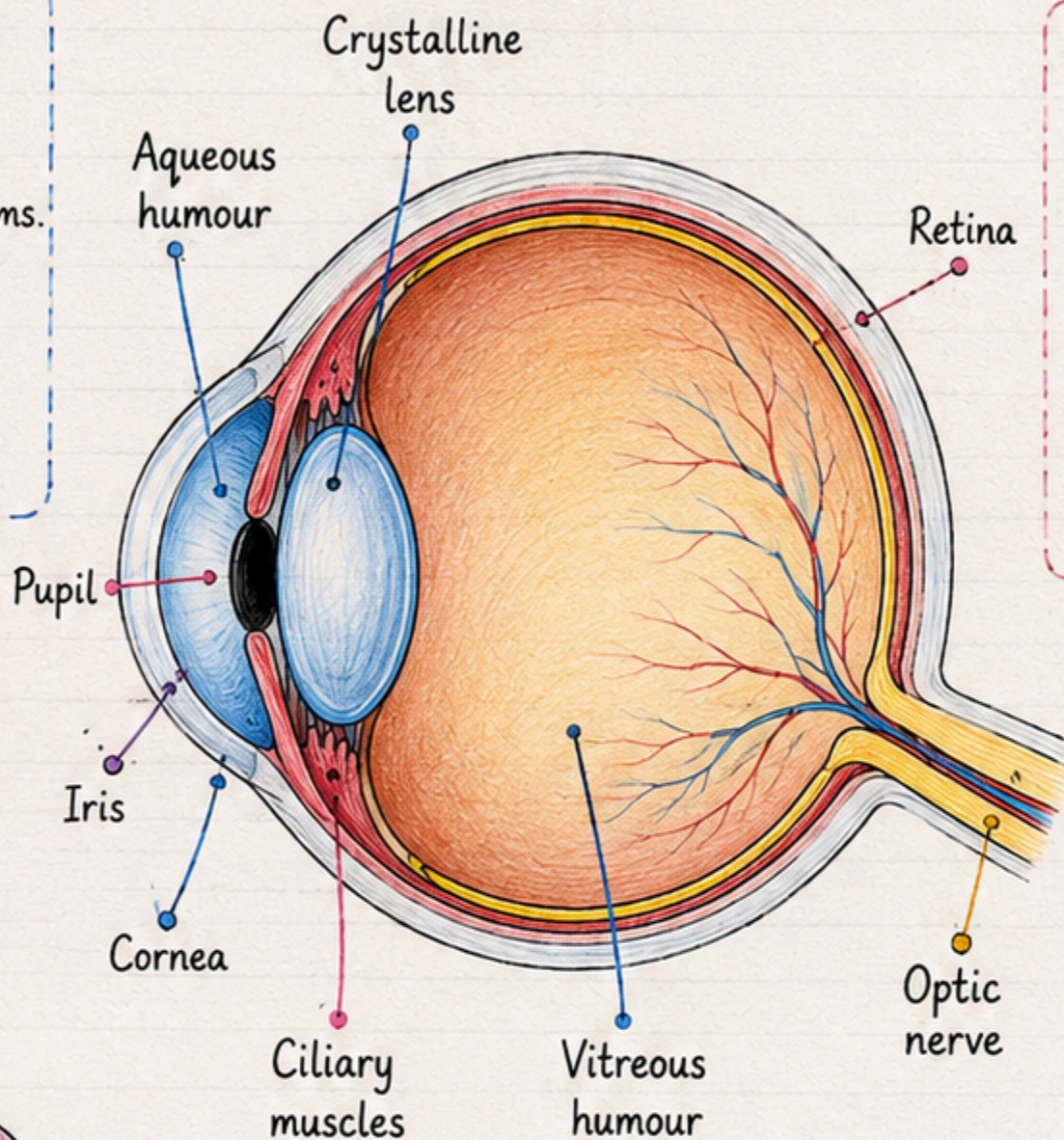
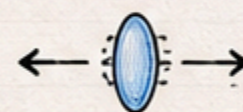
8. Ciliary Muscles 💪

- Surround the lens.
- Change the shape of the lens.
- Helps in focusing on near and far objects.



3. Crystalline Lens 🕒

- Transparent and flexible.
- Changes its shape.
- Helps in focusing light on retina.



Memory Trick



Retina receives image → Optic nerve sends signals to brain

