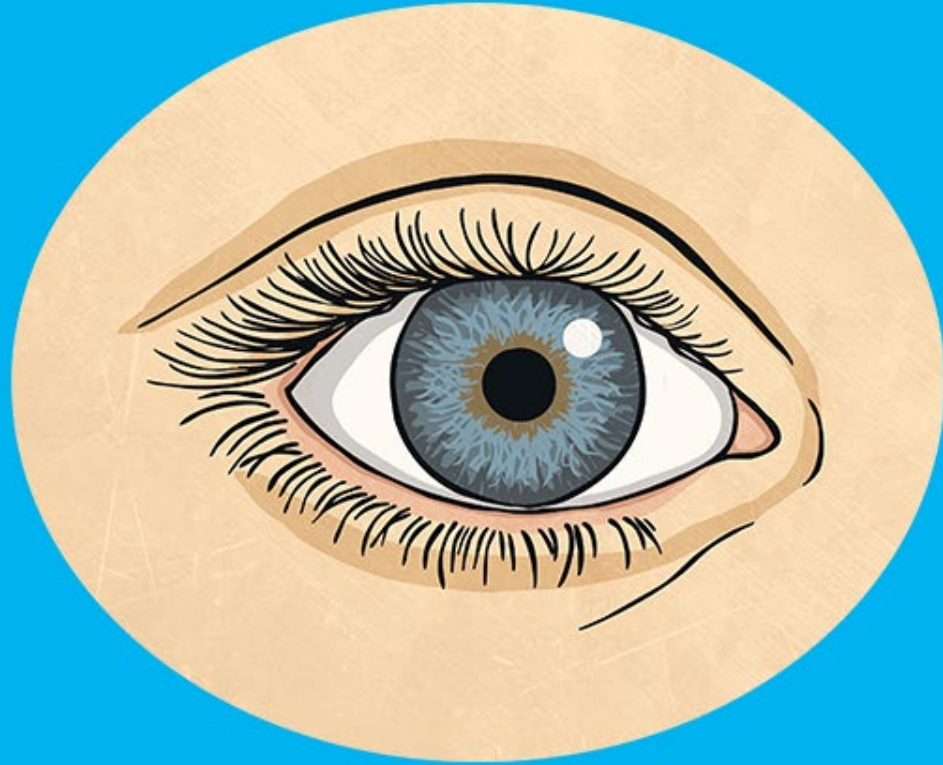


How we See



Parts of the Eye

Cornea (is convex, transparent and allows light to enter the eye)

Lens (is transparent and biconvex. The lens focuses light onto the retina)

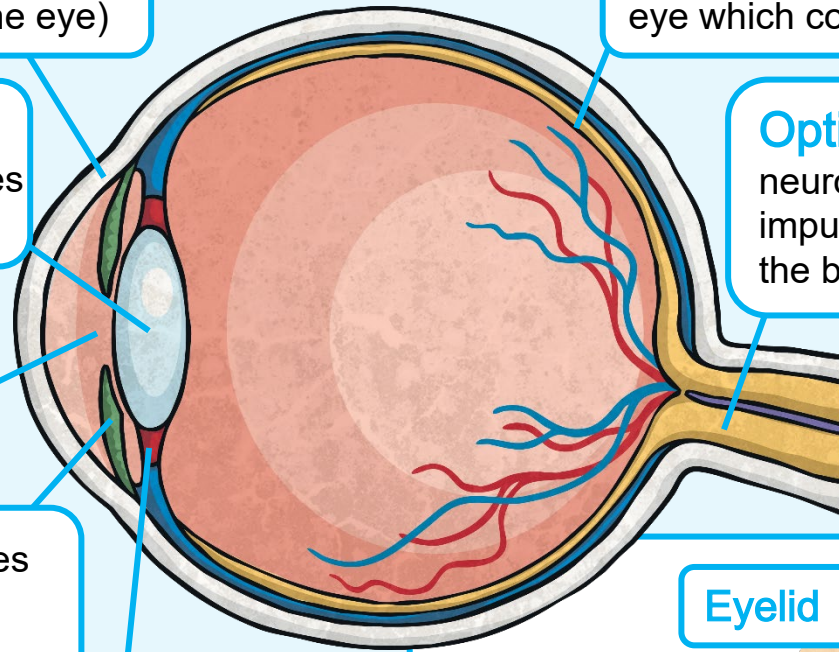
Pupil (a hole through which light passes to enter the eye)

Iris (contracts and relaxes to control the amount of light entering the eye)

Ciliary muscle (can change the shape of the lens to help focus light on the retina)

Retina (the lining of the back of eye which contains light receptors)

Optic nerve (bundles of neurones which carry impulses from the eye to the brain)

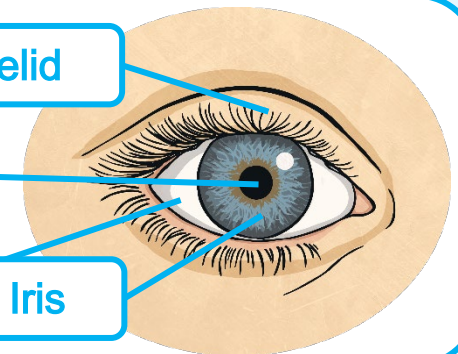


Eyelid

Pupil

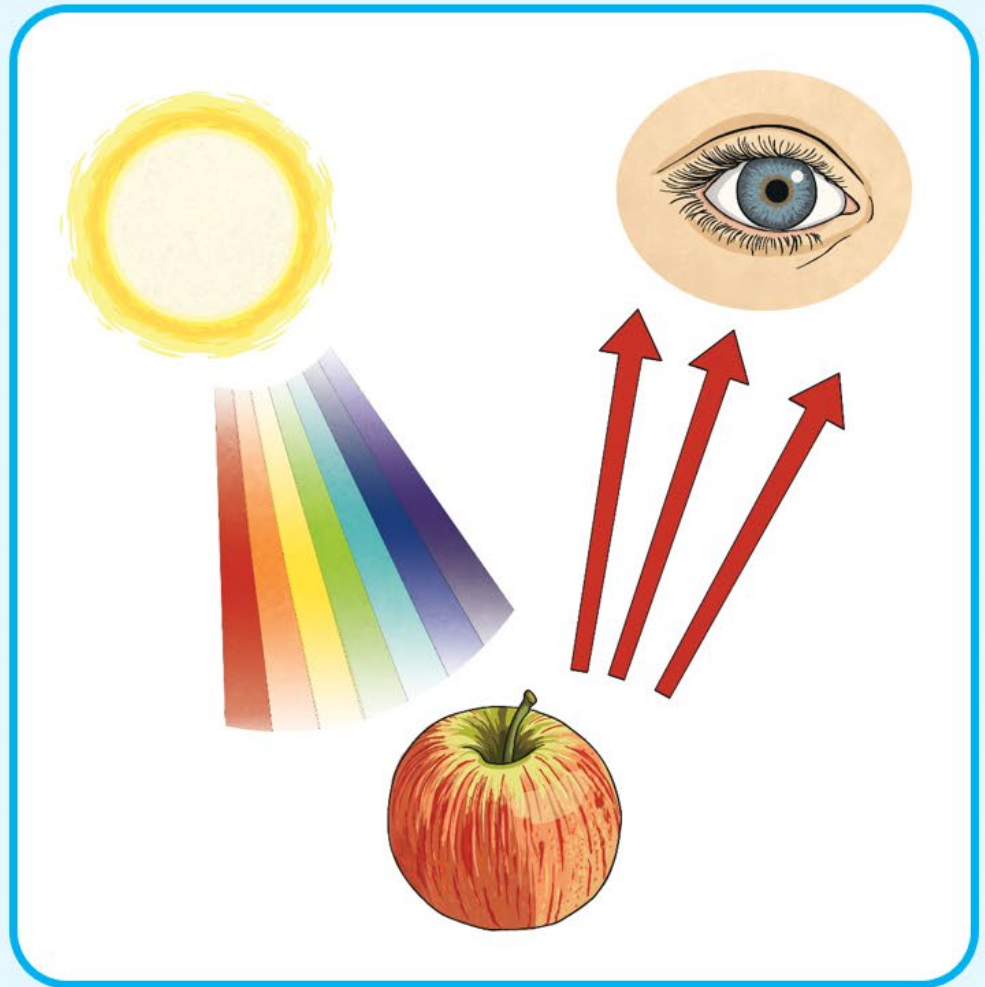
Sclera

Iris



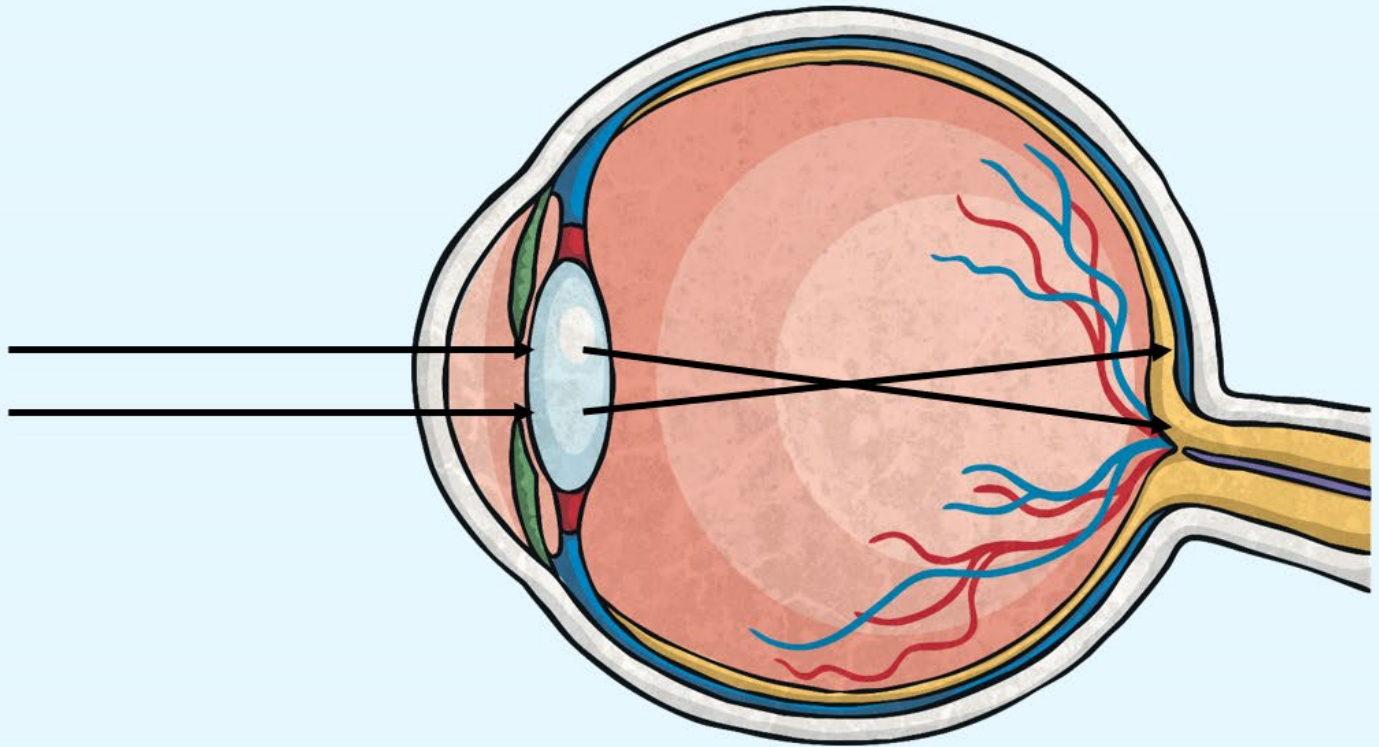
How Do We See?

Light reflects off an object, enters the cornea of the eye and passes the pupil.



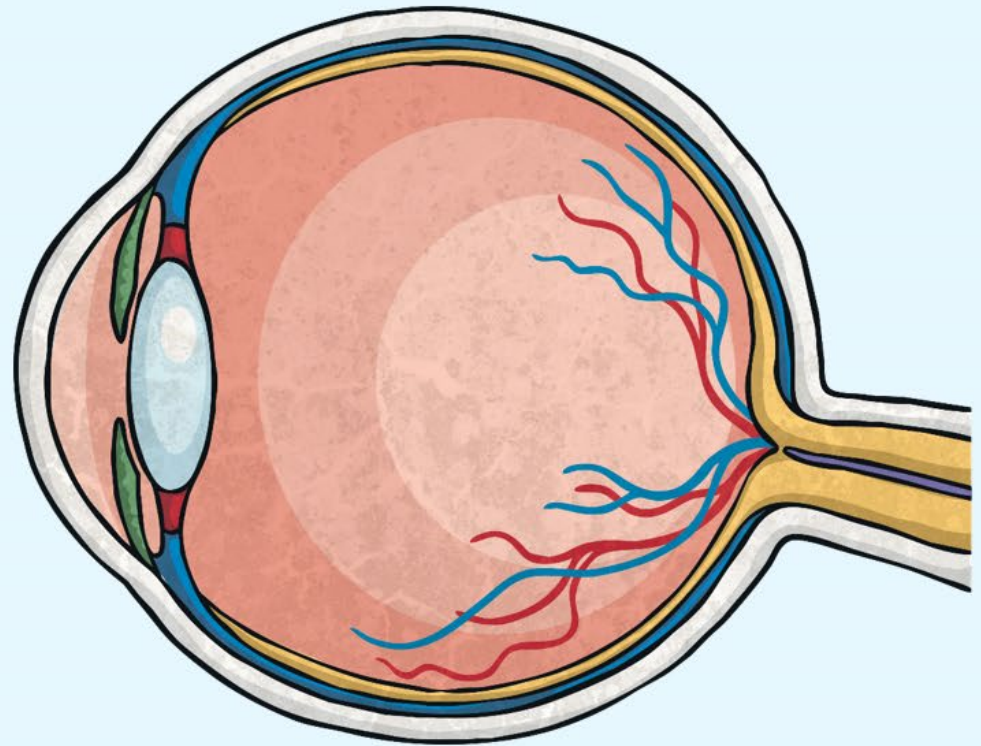
How Do We See?

The lens then focuses the light on to the retina.

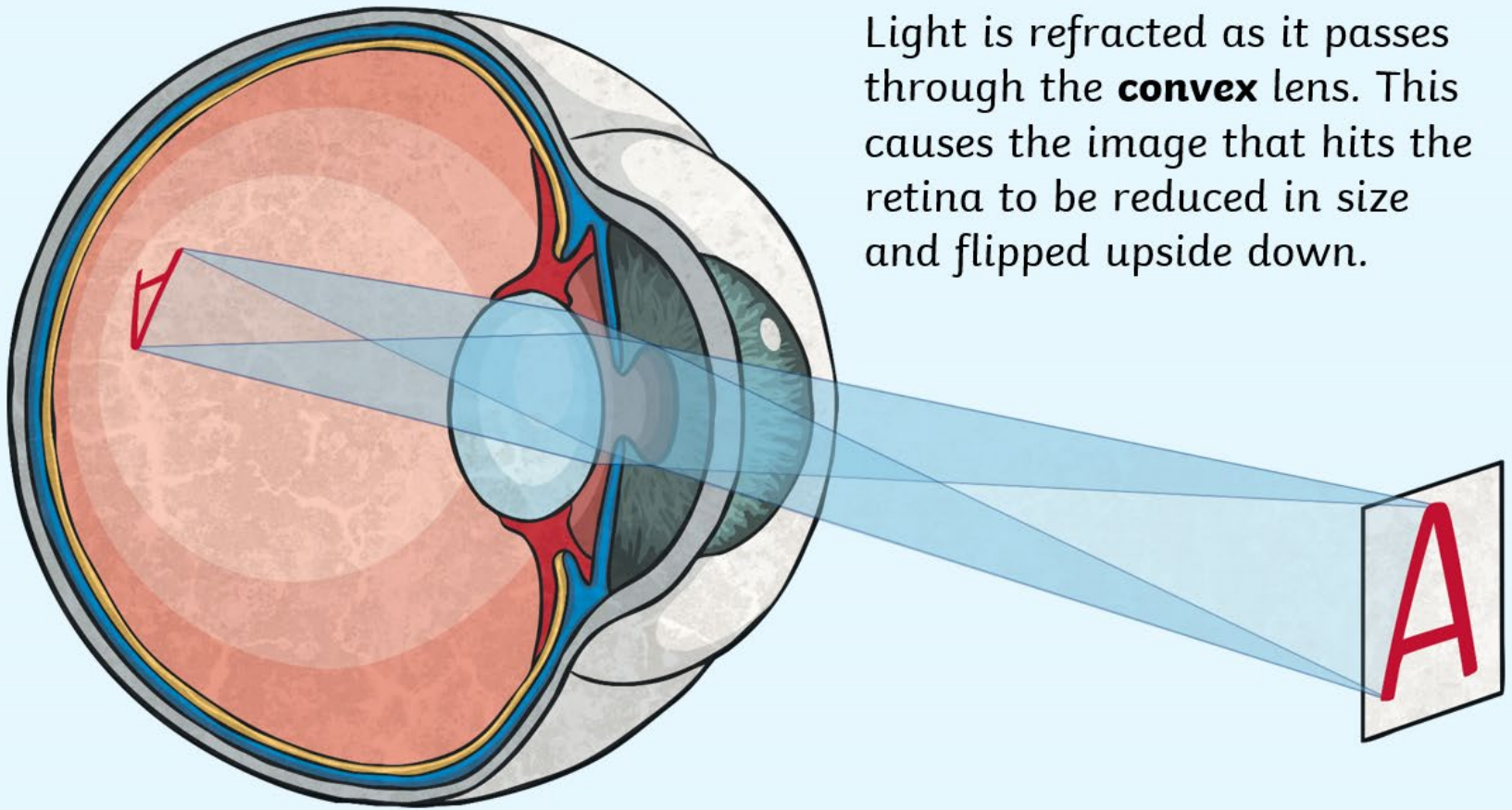


How Do We See?

The retina contains light-sensitive cells that gather information (light, dark, colour, movement) and sends this information to the optic nerve.

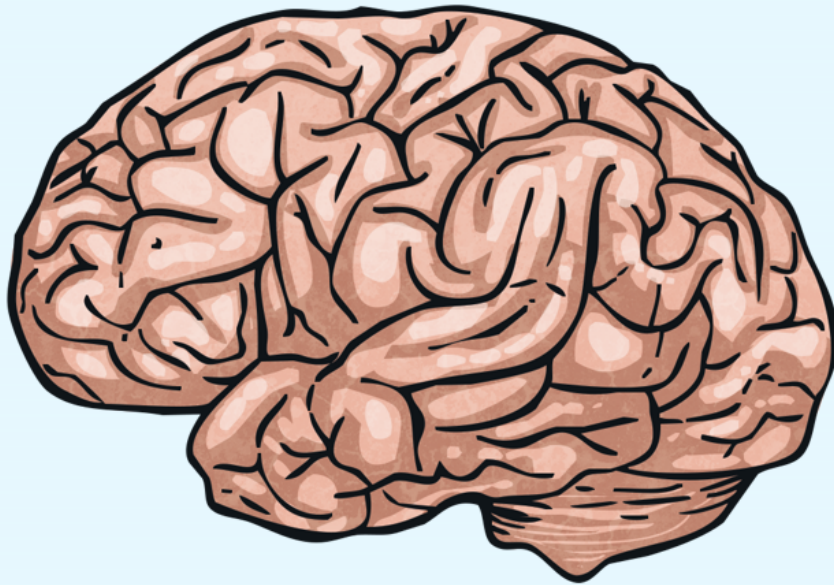


How Do We See?



Light is refracted as it passes through the **convex** lens. This causes the image that hits the retina to be reduced in size and flipped upside down.

How Do We See?

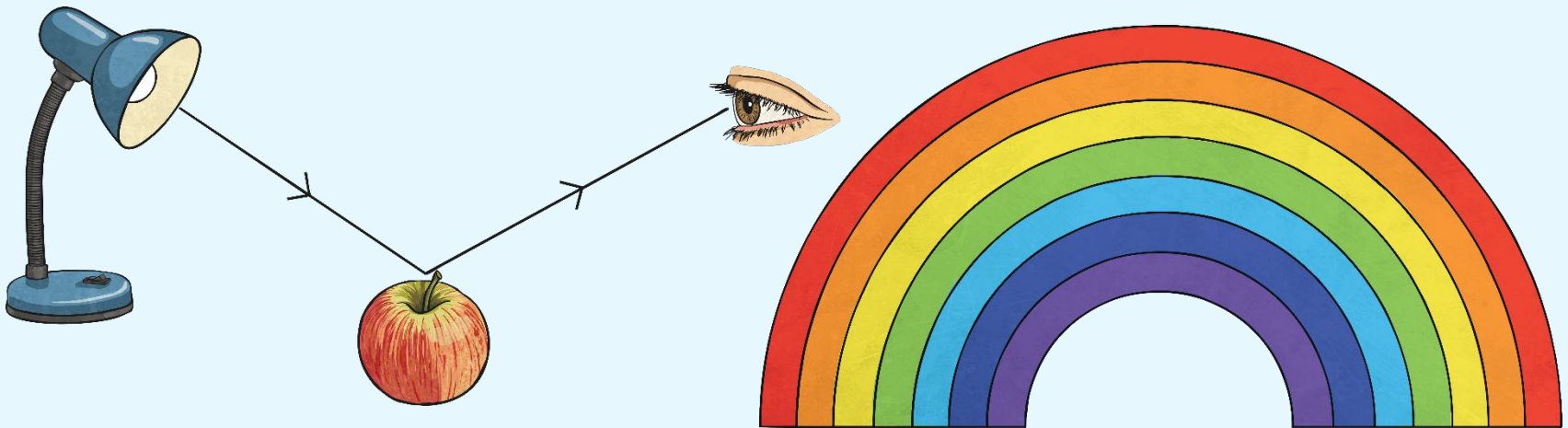


The optic nerve transmits visual information from the retina to the brain. This information is carried in tiny electrical signals along the nerve cells (also called neurones).

Once the electrical signals reach the brain, brain cells in the visual cortex can process the image, turning it the correct way round.

How Do We See Colour?

We usually see light as being white, but it actually contains all the colours of the **spectrum**.



When an object looks **red**, it will absorb every colour except for **red**. This means that it will reflect the red, causing it to enter your eyes.

Therefore, if an object is **green**, it will absorb every colour except for **green**.