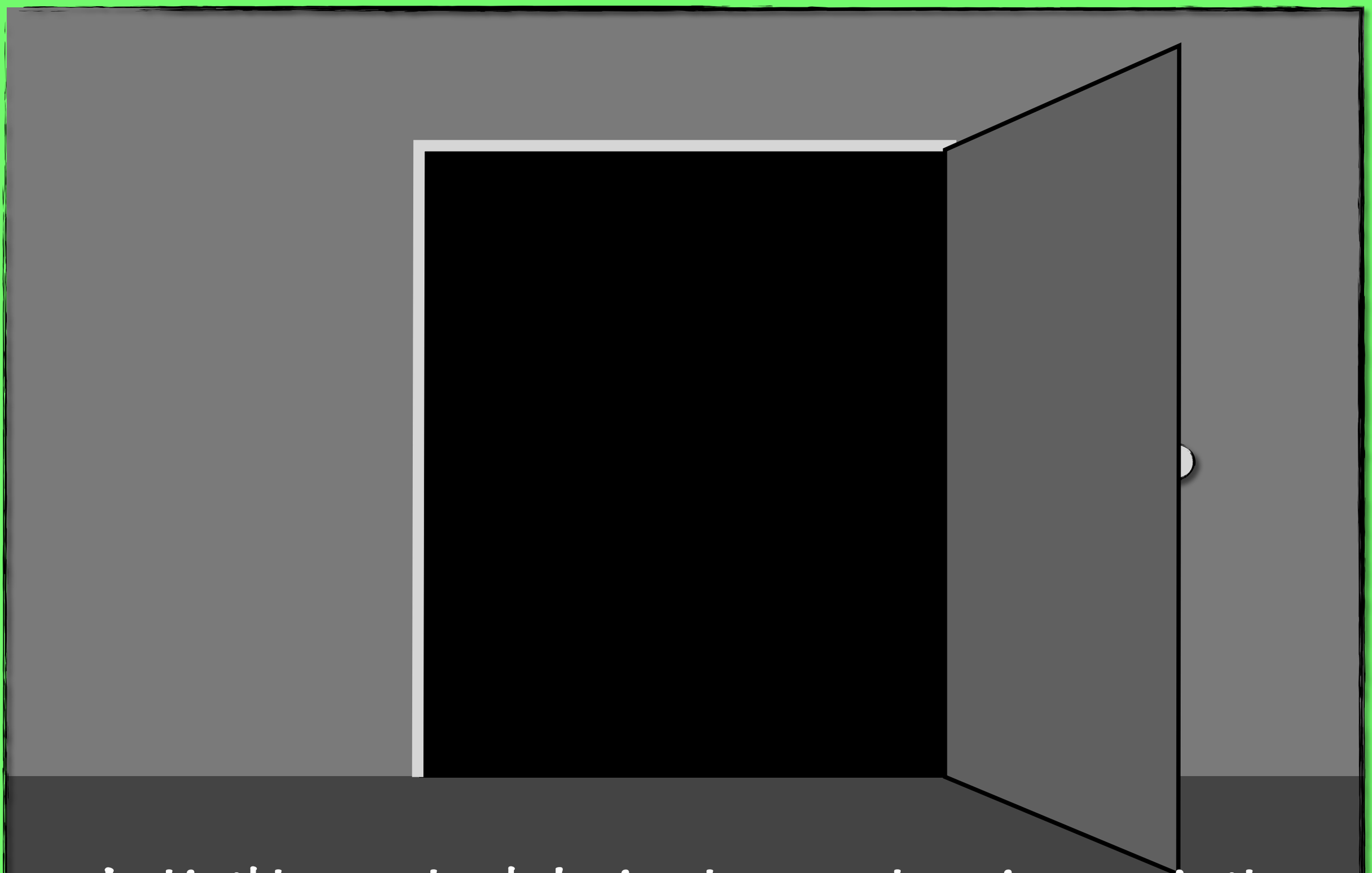
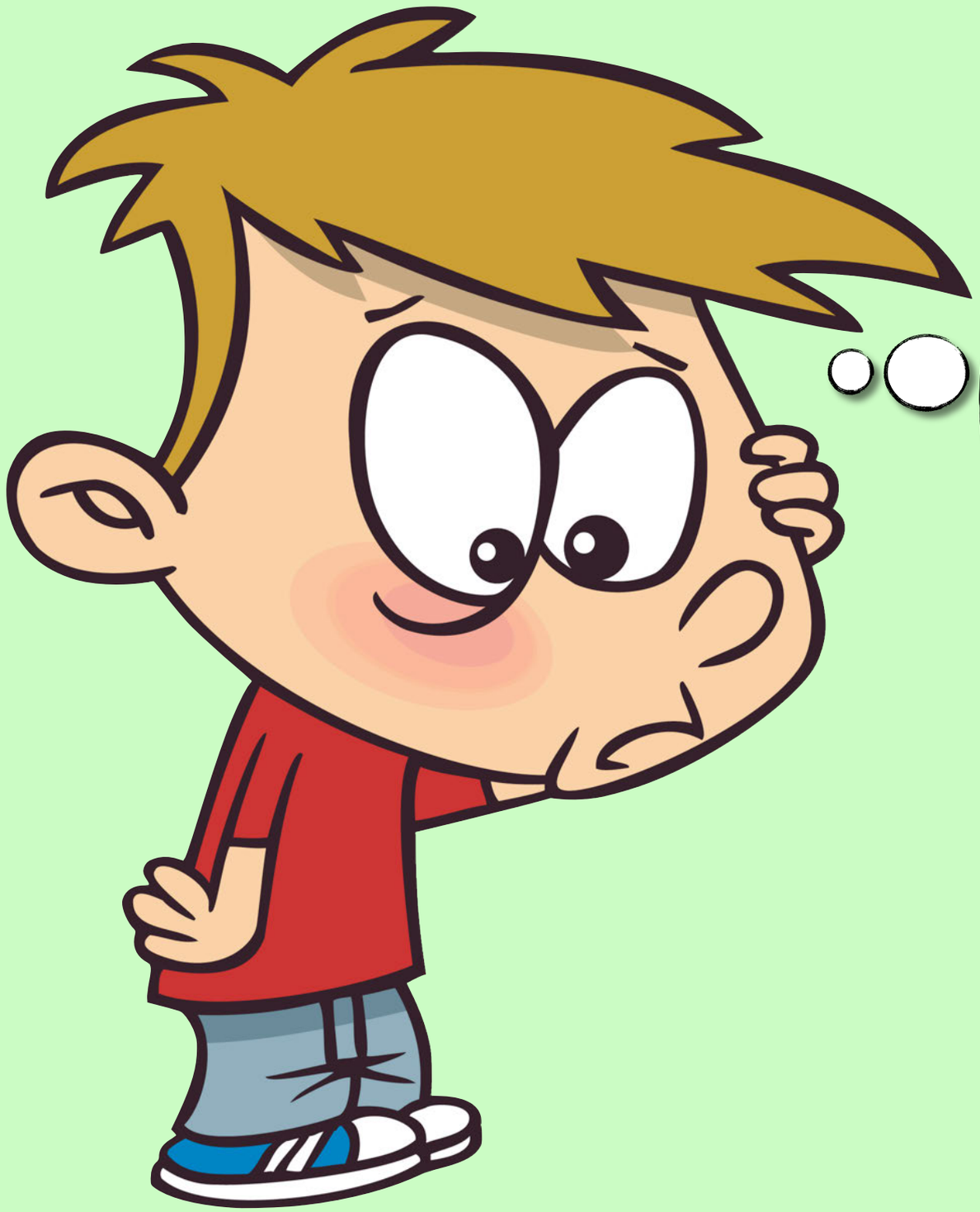
Seeing Light

Learning Objective:

To investigate how we see things through light entering the eyes.



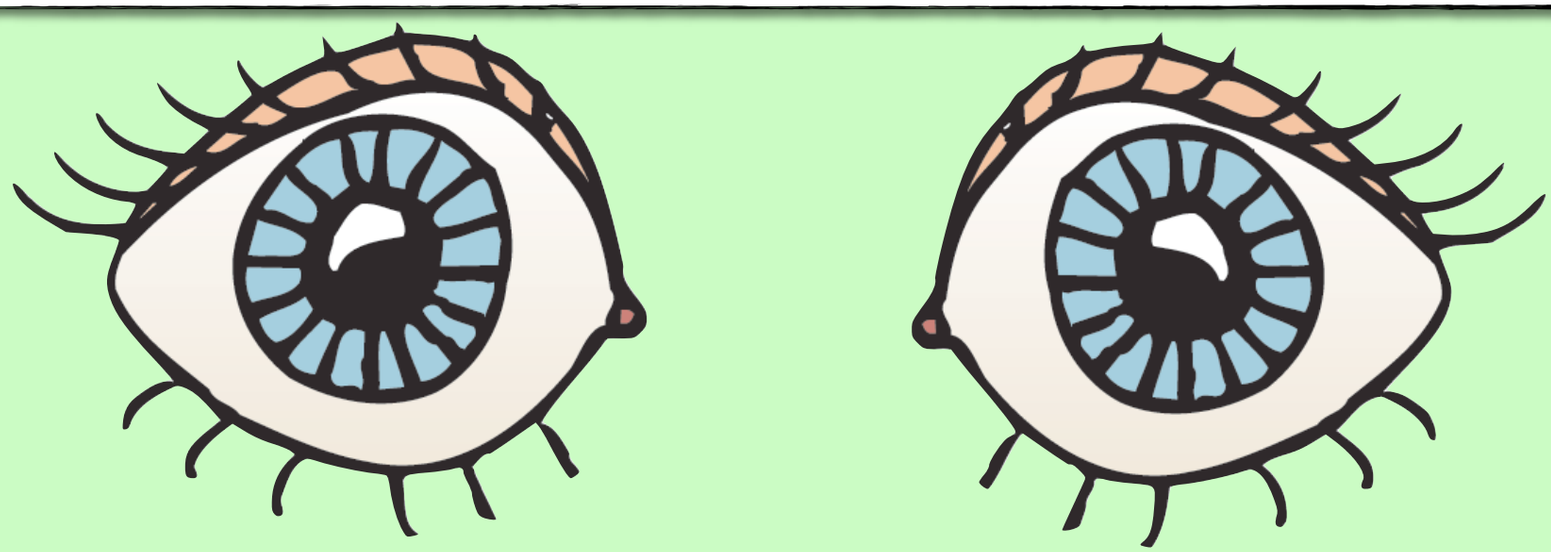
Inside this room is a hula-dancing penguin and an acrobatic elephant. Can you see them? Why not? (They are there, I promise!)



Why would a torch be easier to see in a dark room if the torch was switched on than if it was switched off?

We need light to be able to see things. Without light, we wouldn't be able to see anything at all. We are able to see things because light travels into our eyes which then send signals to the brain. This is why you cannot see so clearly in the dark because there is less light.

Have you ever thought about how your eyes work? Have a look at the cross-section of an eye on the next slide (this is what your eye would look like if it was chopped in half!).



The cornea is a transparent film over the iris.

cornea

The job of the lens is to focus light to the retina.

lens

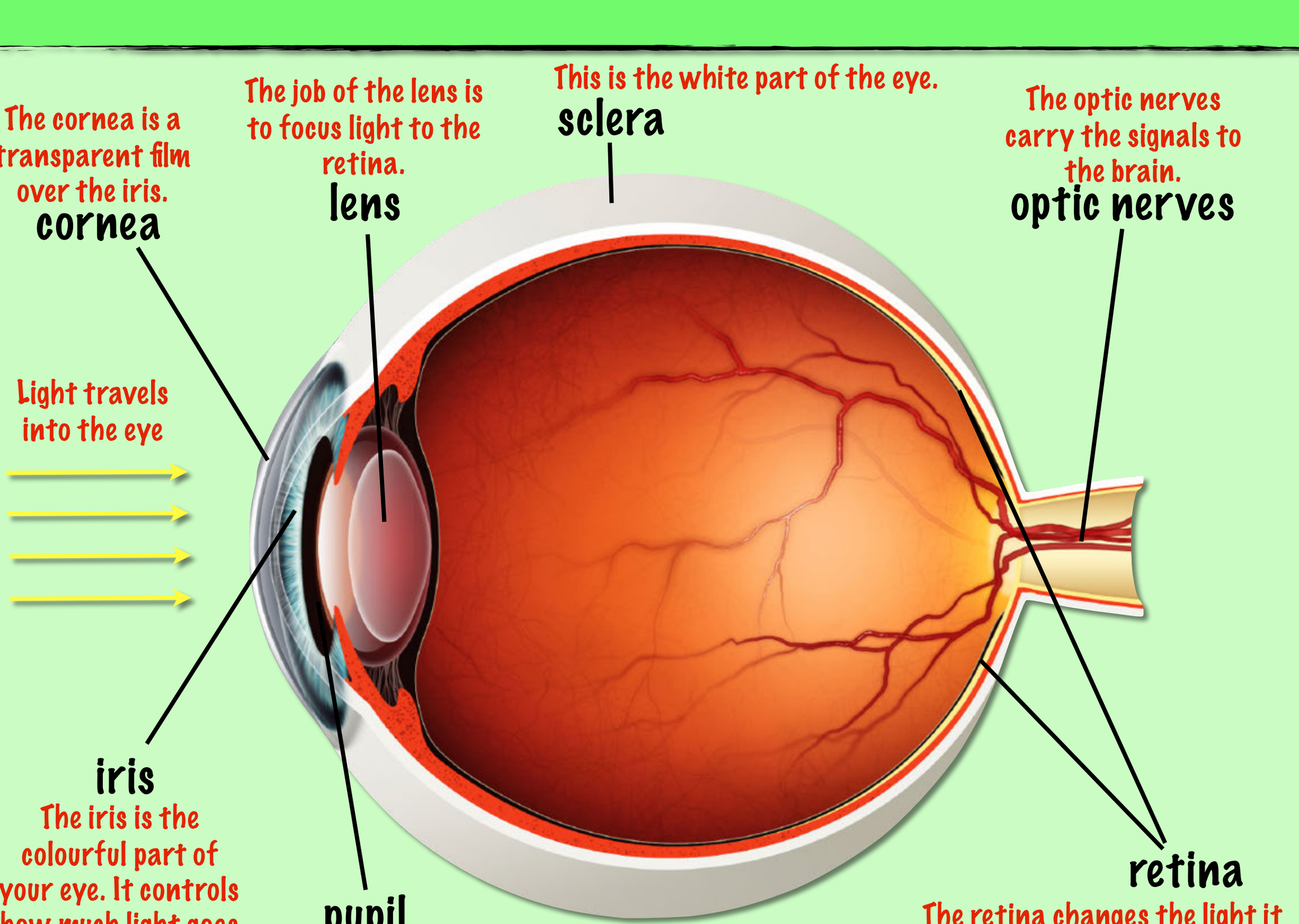
This is the white part of the eye.

sclera

The optic nerves carry the signals to the brain.

optic nerves

Light travels into the eye



iris

The iris is the colourful part of your eye. It controls how much light goes through the pupil

pupil

The pupil is the black part of your eye. It lets light enter the eye.

retina

The retina changes the light it gets through the lens into nerve signals to send to the brain

Have a close look at a friend's eye. Remember not to touch though!

Can you see the cornea (the transparent film over the front of the eye)?

Can you see the iris (the colourful part of the eye)? What colours can you see?

Can you see the pupil (the black part of the eye)?

Can you see the sclera (the white part of the eye)?