

This mark will not be accurate – your mark will be given to you on EDMODO

Anatomy

EYES

Your **eyes** are the organs of sight. You see things because light rays bounce off objects and enter your eyes. Light-sensitive cells at the back of your eyes send information to the brain, which interprets it as a picture, or **image**. Each eye sees objects from a different angle and your brain joins the two images to help you see in 3D. This is called **stereoscopic vision**.

light

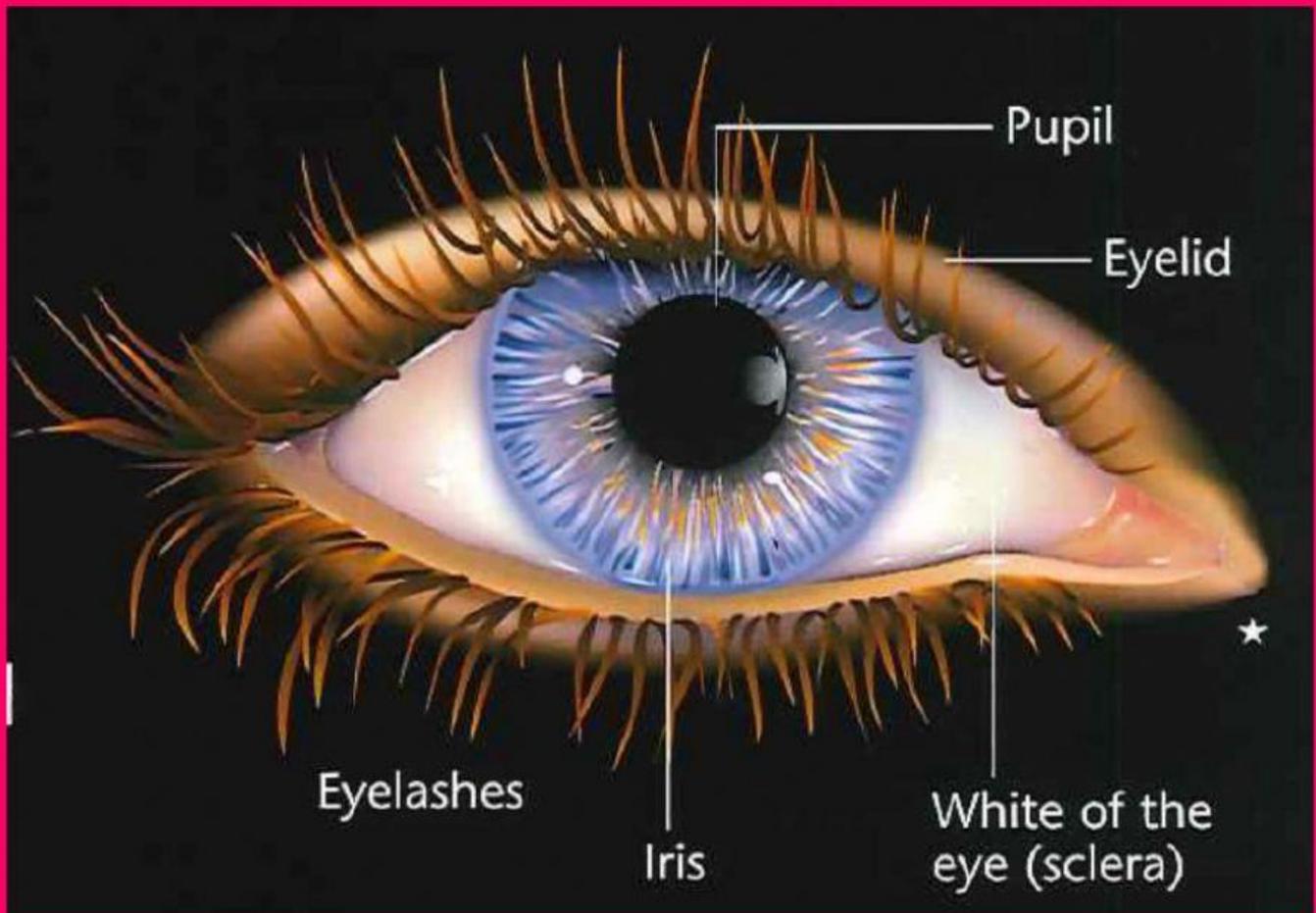
back

eyes

sight

pictures

The _____ are the organs of _____ . You see things because _____ rays bounce off objects and enter your eyes. Light-sensitive cells at the _____ of your eyes send information to the brain, which interprets it as a _____ .

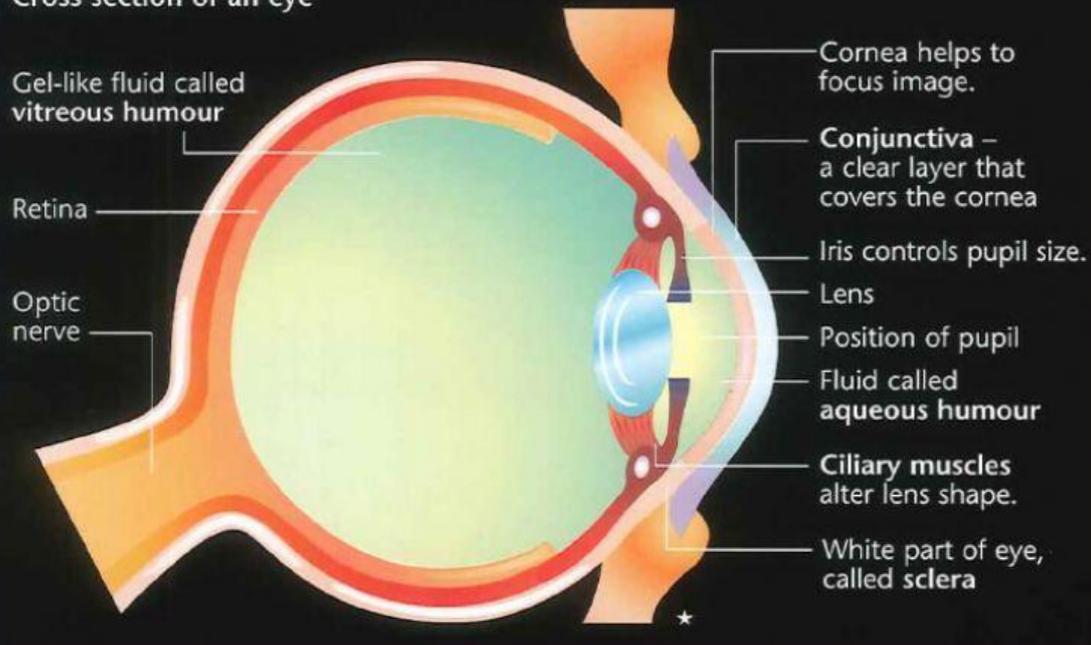


HOW EYES WORK

Light rays enter your eye through a hole called the **pupil**. They travel through a clear layer called the **cornea** and a disc called the **lens**. These bend the light rays so that they form an image on the **retina** at the back of the eye. The lens also turns the image upside down.

The retina contains light-sensitive receptors* called **rods** and **cones**. These convert the image into nerve impulses which travel to the brain along the **optic nerve**. Your brain interprets these impulses as an image, which it also turns the right way up again.

Cross section of an eye

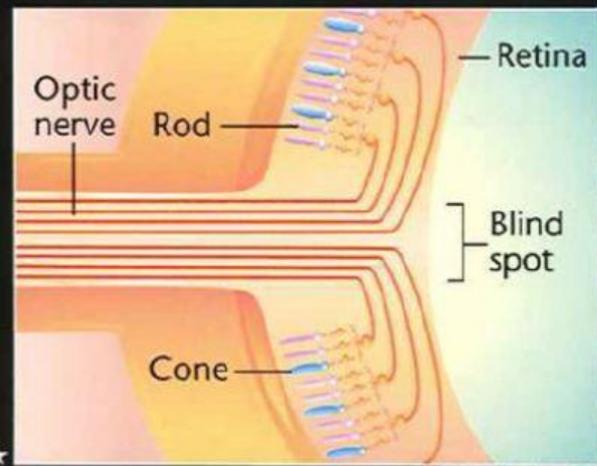


Copy this diagram and label it - SEND IT TO ME ON

RODS AND CONES

Each eye has about 125 million rods and 7 million cones. Rods only detect black and white, but they work well in dim light. Cones see colours but need bright light to work. At night, you see mainly in shades of grey because only your rods are working.

Close-up of area of retina



See for yourself

There are no rods and cones on the area where the optic nerve leaves your eye. If an image falls here, you cannot see it, so this area is called the **blind spot**. Test to find your blind spot by holding this page at arm's length. Close your left eye and stare at the square with your right eye. Slowly bring the page closer to your face and notice the circle disappear.



Write about what you remember in your own words

