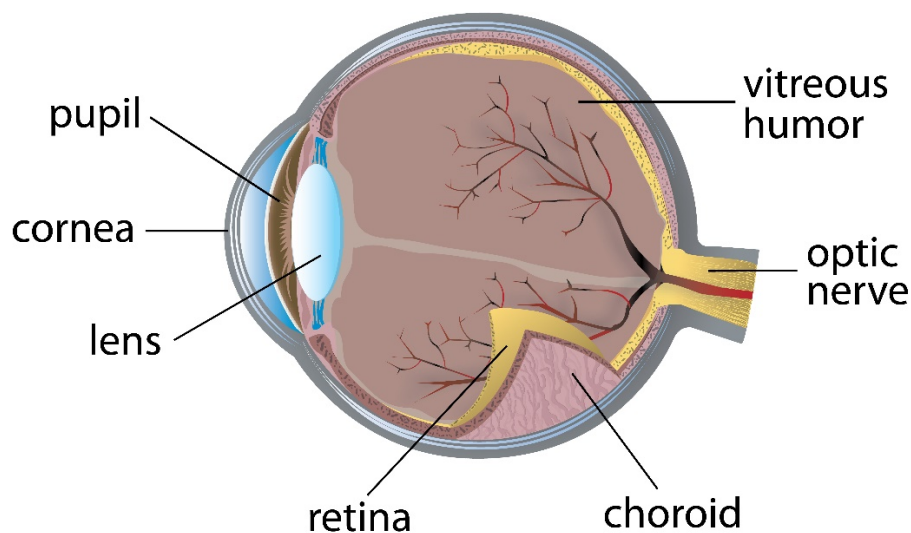


S5 Sight

Sight is one of the five senses that help humans understand what is happening around them. People see through their eyes, which are organs that take in light and images and turn them into electrical impulses that the brain can understand.

Parts of the Human Eye



How does the eye work?

The job of the eye is to focus light. The different parts of the eye help it to carry out its job. The human eye is a complex structure that senses light; the light passes through the cornea, pupil, and lens, and is focused on the retina. The vitreous humor is the clear gel that fills the space between the lens and the retina of the eye, and the hyaloid canal is a small transparent canal running through the vitreous humor from the optical disc to the lens.

Vision involves sensing and focusing light from people and objects. The steps involved are as follows:

- First, light passes through the cornea of the eye. The cornea is a clear, protective covering on the outside of the eye.
- Next, light passes through the pupil. The pupil is a black opening in the eye that lets light enter the eye.
- After passing into the eye through the pupil, light passes through the lens. The lens of the eye is a clear, curved structure. Along with the cornea, the lens helps focus light at the back of the eye.
- The lens must bend light from nearby objects more than it bends light from far-away objects. The lens changes shape to bend the light by just the right amount to bring objects into focus.
- The lens focuses light on the retina, which covers the back of the inside of the eye. The retina has light-sensing photoreceptor cells called rods and cones. Rods let us see in dim light. Cones let us detect light of different colors.
- When light hits rods and cones, it causes chemical changes. The chemical changes start nerve impulses. The nerve impulses travel to the brain through the optic nerve.
- The brain makes sense of the nerve impulses and tells you what you are seeing.