

There are several physical and chemical elements that make up the eye. The table below shows different parts of the human eye and their functions.

Eye part	Description and function(s)
Cornea	The cornea is the outer, transparent covering of the eye. This layer protects the eye from elements that could cause damage to the inner parts of the eye. The cornea also helps to focus light on the retina at the back of the eye.
Sclera	The sclera is commonly referred to as the “white” of the eye. It protects the eye and maintains the shape of the eye ball.
Pupil	The pupil appears as a black dot in the middle of the eye. This black area is actually a hole that takes in light to enable the eye focus on the objects in front of it. The pupil, thus, controls the amount of light that enters the eye.
Iris	The iris contains the pigment which gives the eye its colour. It has radial and circular muscles that control the size of the pupil by dilation and contraction. This allows the eye to take in more or less light depending on how bright it is around. The iris allows more light into the eye when the environment is dark and allows less light into the eye when the environment is bright.
Conjunctiva	This is a membrane that covers the cornea. It is thin and transparent so as to allow light to enter the eye. It is tough and protects the eye from mechanical damage.
Lacrimal glands	These glands are located on the outer corner of each eye. They produce tears which help moisten the eye when it becomes dry, and flush out particles which irritate the eye. As tears flush out potentially dangerous irritants, it becomes easier to focus properly.
Lens	This is a transparent structure filled with a jelly-like substance. The lens focuses light into the retina. It is held in place by the suspensory ligaments attached to the ciliary muscles, which allow the lens to change shape depending on the amount of light entering the eye. Through the ciliary muscles, the lens becomes thicker to focus on nearby objects and thinner to focus on distant objects.
Retina	Retina is the sensory tissue that lines the inner layer of the eye. It is the layer of the eye where images are formed, and it is connected to the optic nerve that transmits the images to the brain to be interpreted. The retina is made up millions of photoreceptors known as rods and cones.
Ciliary body	Ciliary body, also called ciliary muscles , is a ring-shaped tissue which holds and controls the movement of the eye lens, and thus, it helps to control the shape of the lens. The ciliary body contains glandular cells which secrete the aqueous humour.
Suspensory ligaments	The suspensory ligaments attach the lens to the ciliary muscles. When the ciliary muscles contract, they pull the suspensory ligaments and the lens gets long and thin to accommodate rays of light from distant objects. When the ciliary muscles relax, there is less tension on the suspensory ligaments and the

lens becomes more spherical in shape. This enables the accommodation of light rays from near objects.

Choroid

The choroid lies between the retina and the sclera, which provides blood supply to the eye. Just like any other portion of the body, the blood supply gives nutrition to the various parts of the eye.

Vitreous humour

The vitreous humour is the gel located in the back of the eye which helps it hold its shape. This gel takes in nutrients from the ciliary body, aqueous humour and the retinal vessels so the eye can remain healthy. The gel in the vitreous humour is transparent to allow light to get to the retina and also helps maintain the shape of the eyeball.

Aqueous Humor

The aqueous humour is a watery substance that fills the eye. The aqueous humour gives the front of the eye its shape as well as nourishes the cornea and lens. This liquid is drained through the Schlemm canal so that any build-up in the eye can be removed. If the person's aqueous humour is not draining properly, s/he can develop glaucoma.

Optic nerve

Optic nerve is a cranial nerve which contains sensory neurones. The neurones transmit impulses from the rods and cones of the retina to the brain for interpretation. The optic nerve exits the eye at the blind spot.

Blind spot

It is located at the point where the optic nerve leaves the eye. The blind spot is not sensitive to light because it has no rods or cones.

Fovea

The fovea is the centremost part of the macula*. This tiny area is responsible for our central, sharpest vision. A healthy fovea is important for reading, watching television, driving, and other activities that require the ability to see detail.

*Small and highly sensitive part of the retina responsible for detailed central vision. The retina is the very centre of the macular.