## THE STRUCTURE OF THE EYE



## THE STRUCTURE OF THE EYE



Conjunctiva	Has a network of blood vessels to supply nutrients to the cells and remove waste products. It is pigmented that makes the retina appear black, thus preventing reflection of light within the eyeball.
Cornea	Helps to maintain the shape of the anterior chamber of the eyeball
Sclera	Is a pigmented muscular structure consisting of an inner ring of circular muscle and an outer layer of radial muscle. Its function is to help control the amount of light entering the eye so that: - too much light does not enter the eye which would damage the retina - enough light enters to allow a person to see
Choroid	Is where the bundle of sensory fibres form the optic nerve; it contains no light-sensitive receptors
Ciliary body	Has suspensory ligaments that hold the lens in place. It secretes the aqueous humour, and contains ciliary muscles that enable the lens to change shape, during accommodation (focusing on near and distant objects)
Iris	A part of the retina that is directly opposite the pupil and contains only cone cells. It is responsible for good visual acuity (good resolution)
Pupil	Is a thin protective covering of epithelial cells. It protects the cornea against damage by friction (tears from the tear glands help this process by lubricating the surface of the conjunctiva)
Lens	Is the transparent, curved front of the eye which helps to converge the light rays which enter the eye
Retina	Is a transparent, jelly-like mass located behind the lens. It acts as a 'suspension' for the lens so that the delicate lens is not damaged. It helps to maintain the shape of the posterior chamber of the eyeball
Fovea (yellow spot)	Is a layer of sensory neurones, the key structures being photoreceptors (rod and cone cells) which respond to light. Contains relay neurones and sensory neurones that pass impulses along the optic nerve to the part of the brain that controls vision
Blind spot	Is a transparent, flexible, curved structure. Its function is to focus incoming light rays onto the retina using its refractive properties
Vitreous humour	Is a hole in the middle of the iris where light is allowed to continue its passage. In bright light it is constricted and in dim light it is dilated
Aqueous humour	Is an opaque, fibrous, protective outer structure. It is soft connective tissue, and the spherical shape of the eye is maintained by the pressure of the liquid inside. It provides attachment surfaces for eye muscles

Conjunctiva	Is a thin protective covering of epithelial cells. It protects the cornea against damage by friction (tears from the tear glands help this process by lubricating the surface of the conjunctiva)
Cornea	Is the transparent, curved front of the eye which helps to converge the light rays which enter the eye
Sclera	Is an opaque, fibrous, protective outer structure. It is soft connective tissue, and the spherical shape of the eye is maintained by the pressure of the liquid inside. It provides attachment surfaces for eye muscles
Choroid	Has a network of blood vessels to supply nutrients to the cells and remove waste products. It is pigmented that makes the retina appear black, thus preventing reflection of light within the eyeball.
Ciliary body	Has suspensory ligaments that hold the lens in place. It secretes the aqueous humour, and contains ciliary muscles that enable the lens to change shape, during accommodation (focusing on near and distant objects)
Iris	Is a pigmented muscular structure consisting of an inner ring of circular muscle and an outer layer of radial muscle. Its function is to help control the amount of light entering the eye so that: - too much light does not enter the eye which would damage the retina - enough light enters to allow a person to see
Pupil	Is a hole in the middle of the iris where light is allowed to continue its passage. In bright light it is constricted and in dim light it is dilated
Lens	Is a transparent, flexible, curved structure. Its function is to focus incoming light rays onto the retina using its refractive properties
Retina	Is a layer of sensory neurones, the key structures being photoreceptors (rod and cone cells) which respond to light. Contains relay neurones and sensory neurones that pass impulses along the optic nerve to the part of the brain that controls vision
Fovea (yellow spot)	A part of the retina that is directly opposite the pupil and contains only cone cells. It is responsible for good visual acuity (good resolution)
Blind spot	Is where the bundle of sensory fibres form the optic nerve; it contains no light-sensitive receptors
Vitreous humour	Is a transparent, jelly-like mass located behind the lens. It acts as a 'suspension' for the lens so that the delicate lens is not damaged. It helps to maintain the shape of the posterior chamber of the eyeball
Aqueous humour	Helps to maintain the shape of the anterior chamber of the eyeball