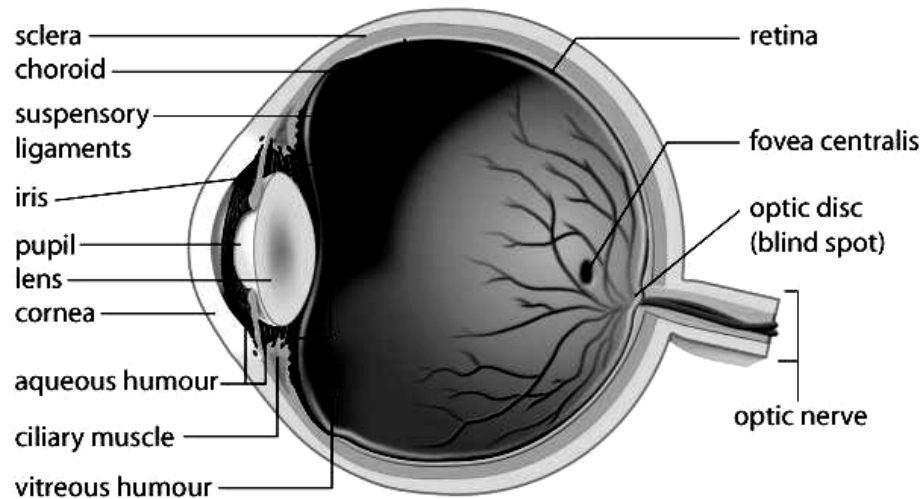


Investigation 12.A: Dissection of an Eye Answer Key

Answers to Analysis Questions

1. Your sketch should be similar to the following:



2. Your two-column chart should be similar to the following:

Eye structure	Eye function
optic nerve	receives impulses from the photoreceptors (rods and cones) and transmits sensory information from the eye to the brain
posterior (rear) chamber	contains vitreous humour
vitreous humour	maintains the shape of the eyeball and supports the surrounding cells
sclera	protects and supports the eyeball
choroids	absorbs stray light rays that are not detected by the photoreceptors and contains blood vessels that nourish the eye
retina	contains the photoreceptors for sight
blind spot	has no actual function; is the area where the ganglion cells merge to form the optic nerve; contains no photoreceptors so is incapable of detecting light
fovea centralis	provides for acute vision because it contains a high density of cones
anterior (front) chamber	contains aqueous humour
lens	bends and focusses light rays onto the fovea centralis
ciliary muscles	changes the shape of the lens in order to focus
suspensory ligaments	attach the lens to the ciliary muscles
aqueous humour	maintains the shape of the cornea and provides oxygen and nutrients for the surrounding cells
iris	regulates amount of light entering the eye
pupil	provides opening for light to enter the inner eye
cornea	transparent part of the sclera that bends light rays into the eye

CHAPTER 12	Investigation 12.A: Dissection of an Eye (cont'd)	BLM 12.2.7
HANDOUT		

3. On your diagram, you should label rods and cones in the retinal layer at the back of the eye. Rods and cones are the receptors for sight. The rods permit vision in dim light and at night, and the cones permit vision in bright light needed for colour vision.