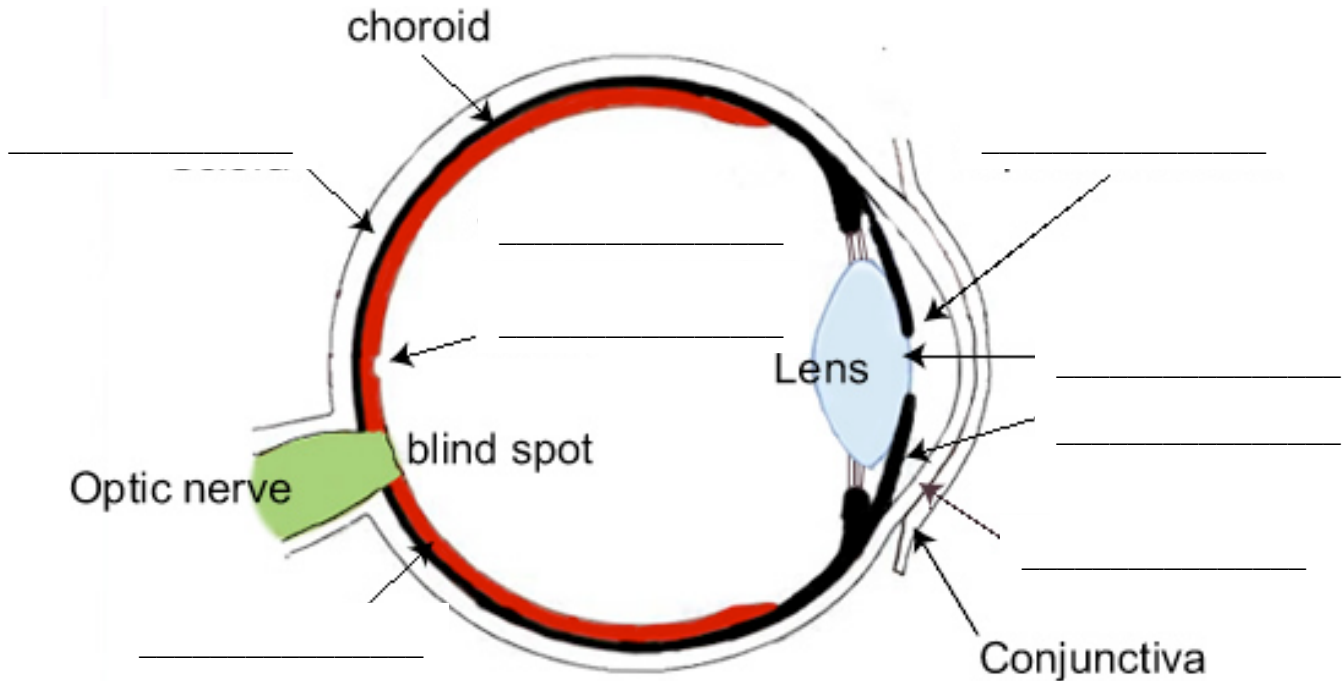


The Human Eye



The Iris

- _____ part of eye.
- Opens and closes around a central hole, the _____, to let more or less _____ in .

The Pupil

- The black hole in the iris that lets _____ pass to the _____.

Cornea and Lens

- Lens and cornea cause light to _____ on one spot to form a sharp image.
- Cornea - transparent bulge on top of the pupil that _____ light.
- Light _____ through cornea, than through the lens. The lens refracts light onto the retina.

The Retina

- The _____ at the back of the eye that transmits the images you see to the brain.
- It is composed of:
 - _____: sensitive to dim light
 - _____: sensitive to bright light and color
 - There are 3 types of cones
 - sensitive to _____
 - sensitive to _____
 - sensitive to _____
- The retina converts light signal into _____ that is transmitted to brain through the optic nerve.

Blindspot

- A spot at the _____ where the _____ is located.
- There is no _____ at this point so an image that forms here will not be seen.
- You don't notice your blind spot because your left eye can see what is in the blindspot of the right eye and vice versa.

Find your blind spot! Using the diagram below, fixate on the cross, close your right eye and hold the figure about 1.5 feet from your face. When the filled circle disappears, its image is on your blind spot. Fixate on the lower cross. Note how the line appears continuous.



How you See

- The eye creates a _____ image on the retina. The brain takes the inverted image and flips it.

Ciliary Muscles

- Responsible for _____: change the shape of lens
 - changes the _____ to allow focusing of the image on the retina.
- Healthy eyes can accommodate to view distant and nearby objects.

Hyperopia

- Can see _____, not nearby ones
- Distance between _____ and _____ is too small or cornea-lens combination is too weak.
- Light from nearby objects focus behind the retina
- Use _____ lens to help refract light onto the retina (called a _____)

Presbyopia

- Eye lens loses _____ resulting in loss of accommodation as a person gets older.
- Can't read small print as easily when you are younger.
- Not due to eyeball being too short for focusing.
- Also corrected with _____ lens.

Myopia

- Can see _____, not ones far away
- Distance between lens and retina is too _____ or cornea-lens combination converges light too strongly
- Light from distant object is brought into focus in _____ of the retina
- A _____ lens is used to correct vision
 - Called a negative _____