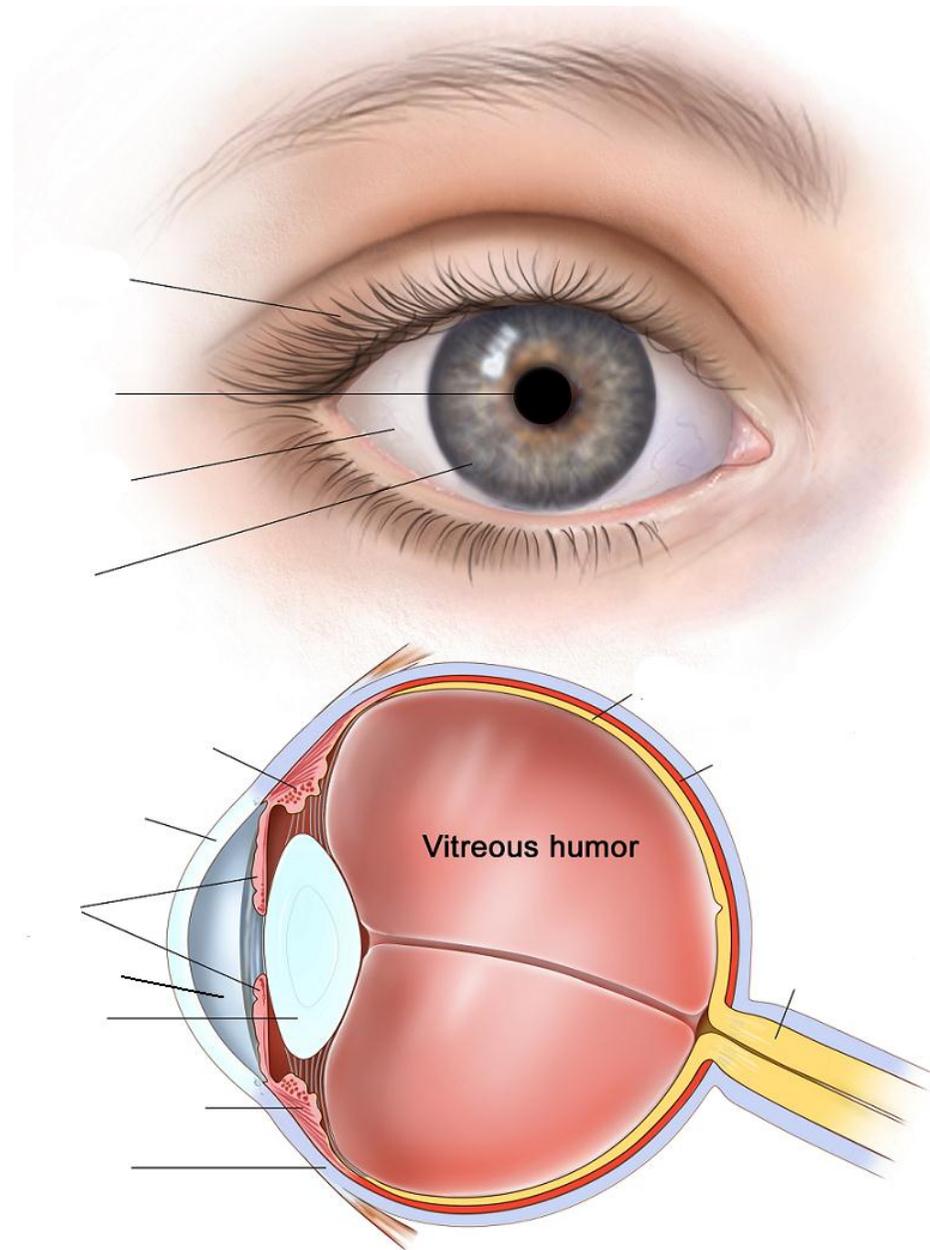


## THE EYE: STRUCTURE, FUNCTION AND VISION DEFECTS



The \_\_\_\_\_ is the spherically-shaped \_\_\_\_\_ outer layer where light first enters the eye. This is the region where \_\_\_\_\_ first occurs. The \_\_\_\_\_ humor is mostly made up of \_\_\_\_\_ and provides \_\_\_\_\_ to maintain the shape of the \_\_\_\_\_.

The \_\_\_\_\_ is the coloured portion of the eye. The circular opening in the centre of the iris is the \_\_\_\_\_ which opens to allow \_\_\_\_\_ into the interior of the eye when lighting conditions are poor. It closes up more in order to block some of the light in \_\_\_\_\_ conditions.

The \_\_\_\_\_ is a flexible \_\_\_\_\_ lens made up of proteins. The lens changes \_\_\_\_\_ in order to adjust the \_\_\_\_\_ length for closer or farther objects. The shape of the lens is controlled by the \_\_\_\_\_ body (ciliary \_\_\_\_\_ and \_\_\_\_\_). The ciliary muscles \_\_\_\_\_ or \_\_\_\_\_ in order to change the shape of the lens.

The ciliary muscles \_\_\_\_\_ to pull the lens into a \_\_\_\_\_ shape. This allows the eye to focus more easily on \_\_\_\_\_ objects (\_\_\_\_\_). As a person ages, the lens becomes \_\_\_\_\_ and less \_\_\_\_\_.

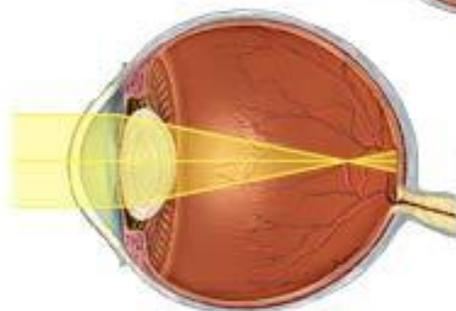
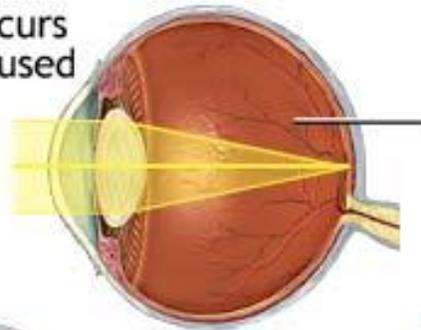
The \_\_\_\_\_ humor is a \_\_\_\_\_/\_\_\_\_\_-like sac that contains mostly \_\_\_\_\_. It provides support for the \_\_\_\_\_ and prevents too much \_\_\_\_\_ from occurring inside the eye.

The \_\_\_\_\_ is the thin layer of cells on the \_\_\_\_\_ of the eye. It contains light-sensitive cells called \_\_\_\_\_ and colour-sensitive cells called \_\_\_\_\_. The \_\_\_\_\_ forms on this part of the eye. The \_\_\_\_\_ is a dark layer of cells behind the \_\_\_\_\_ which absorbs excess light so it doesn't bounce around in the eye.

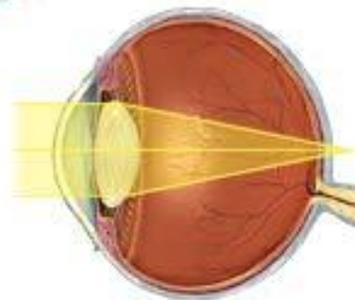
The \_\_\_\_\_ nerve attaches to the retina and carries \_\_\_\_\_ signals from the eye to the \_\_\_\_\_. Where the optic nerve attaches to the retina there are no retinal \_\_\_\_\_. This region is called the \_\_\_\_\_.

The white part of the eye is called the \_\_\_\_\_. It is the tough outer protective layer.

Normal vision occurs when light is focused



Nearsightedness:



Farsightedness:

The three major vision defects are:

- \_\_\_\_\_ (nearsightedness)
- \_\_\_\_\_ (farsightedness)
- \_\_\_\_\_

Myopia occurs when the eye focuses light \_\_\_\_\_ of the retina. The person has difficulty seeing objects that are \_\_\_\_\_. This occurs when the eyeball is too \_\_\_\_\_. The correction for this defect is a \_\_\_\_\_ meniscus lens which focuses the light further back so it reaches the \_\_\_\_\_.

Hyperopia occurs when the eye focuses light \_\_\_\_\_ the retina. The person has difficulty seeing objects that are \_\_\_\_\_. This occurs when the eyeball is too \_\_\_\_\_. The correction for this defect is a \_\_\_\_\_ meniscus lens which focuses the light sooner so it forms an image on the \_\_\_\_\_.

