

- Made of two layers: (pigmented layer – outer layer) / (neural layer – inner layer)
 - Retina cells: rods (night vision) and cones (color vision)
- Cavities and Chambers of the Eye
 - **Anterior cavity**
 - **Anterior chamber**
 - **Posterior chamber**
 - Filled with fluid called **aqueous fluid (humor)**
 - **Posterior cavity**
 - **Vitreous chamber**
 - Filled with fluid called **vitreous fluid (humor)**
- Cavities and Chambers of the Eye
 - **Aqueous fluid-made in the ciliary body, exits out to pupil and cornea to clean the eyeball and gets rid of debris**
 - Sometimes called **aqueous humor**
 - Secreted by cells at the ciliary body area
 - Enters the posterior chamber (posterior of the iris)
 - Flows through the pupil area
 - Enters the anterior chamber
 - Flows through the canal of Schlemm, circular thing at very bottom of cornea
 - Enters into venous circulation
- Cavities and Chambers of the Eye
 - **Vitreous fluid**
 - Gelatinous material in the posterior chamber
 - Sometimes called **vitreous humor**
 - Supports the shape of the eye-maintains the shape of eye, if vitreous humor does not work well, retina will fall forward and detach. Doctors get them all the time from getting hit in the head so hard, retina is similar to tissue paper. Vitreous humor creates pressure on retina to keep it in place.
 - Supports the position of the lens
 - Supports the position of the retina
 - Aqueous humor can flow across the vitreous fluid and over the retina
- **Aqueous fluid**
 - If this fluid cannot drain through the canal of Schlemm, pressure builds up
 - This is **glaucoma-suction cup on eye will tell whether has high pressure or low pressure, checking for glaucoma**
- **Vitreous fluid**
 - If this fluid is not of the right consistency, the pressure is reduced against the retina
 - The retina may detach from the posterior wall (**detached retina**)
- **Visual Pathways-need to know this**
 - Light waves pass through the cornea
 - Pass through the anterior chamber
 - Pass through the pupil
 - Pass through the posterior chamber
 - Pass through the lens
 - The lens focuses the image on some part of the retina
 - This creates a depolarization (we are taking the resting membrane potential-the chemicals on outside versus chemicals on inside-some chemicals go inside and some go outside, starts that action potential or electrical activity to be moved down to axon) of the neural cells
 - Signal is transmitted to the brain via CN II

****Optic chiasm- where transfer of information for eyes happens to switch right eyeball to left side of brain and to send left eyeball info to right side of the brain, right behind eyeball****