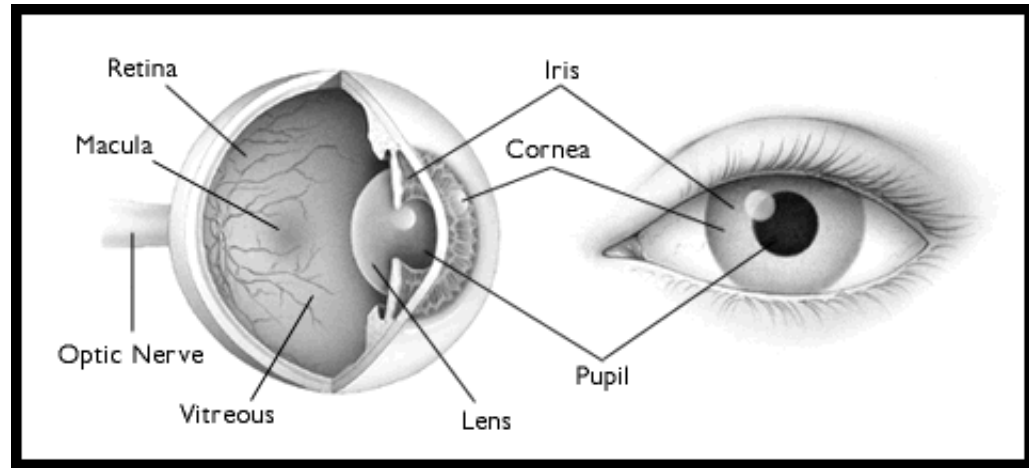
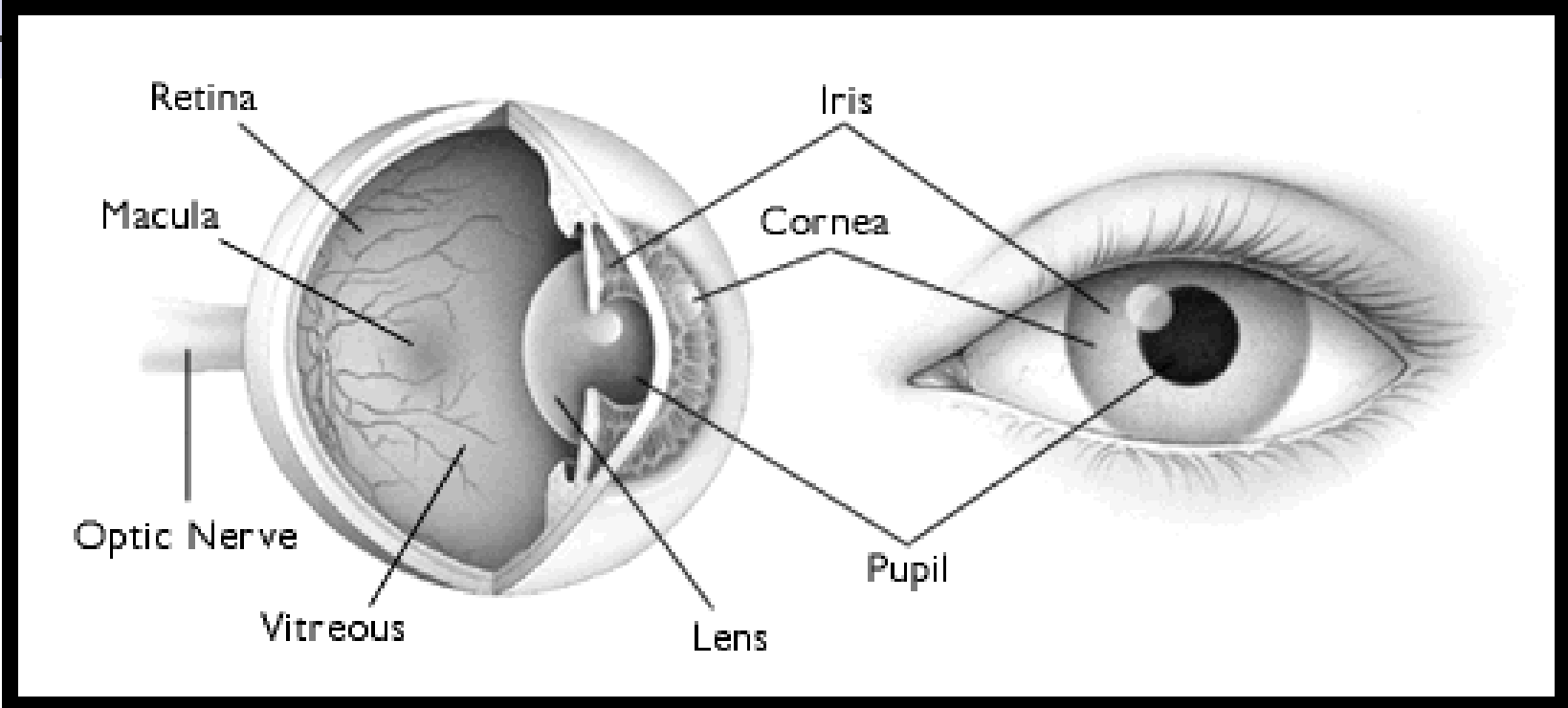
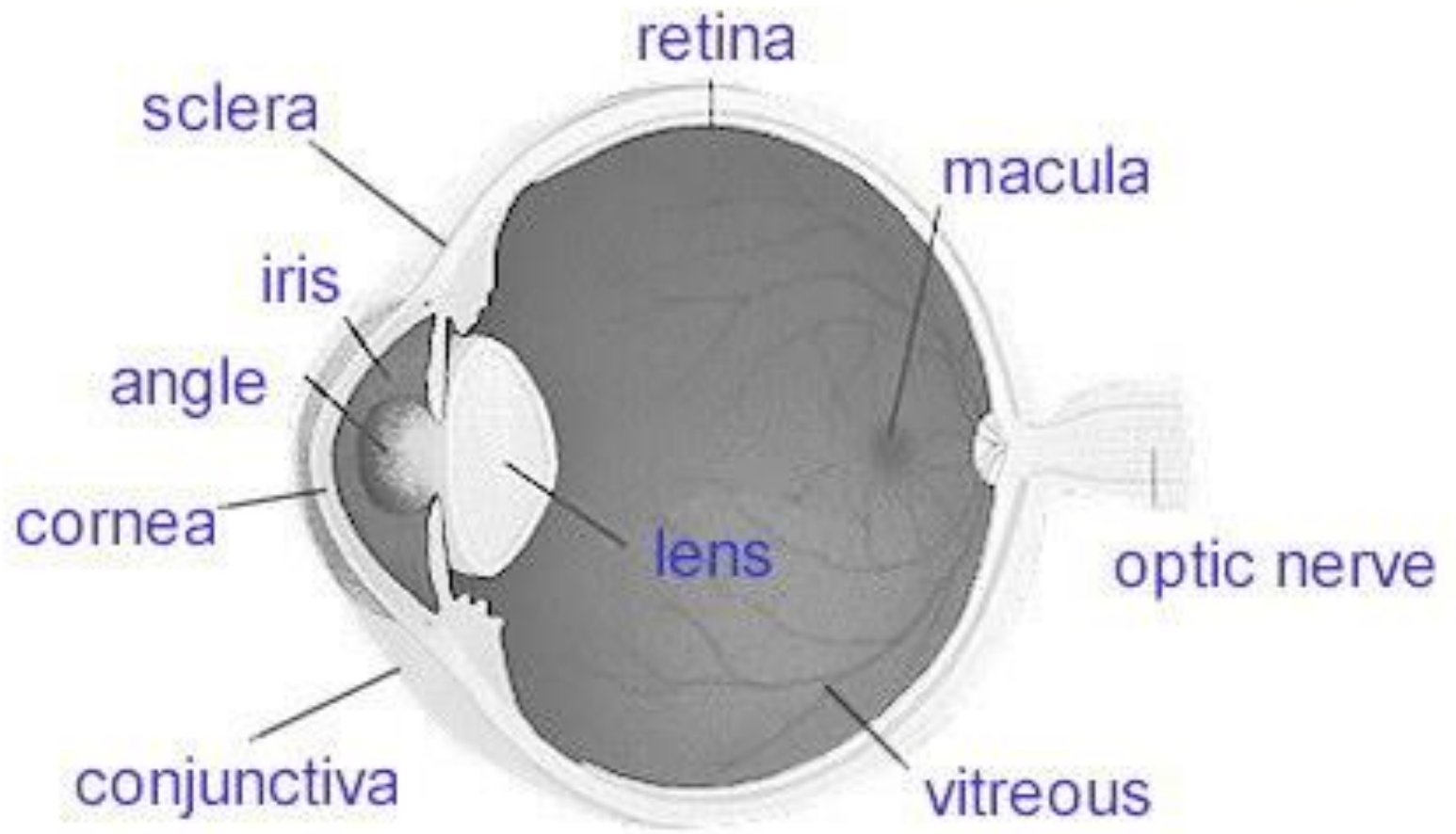
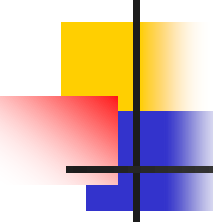


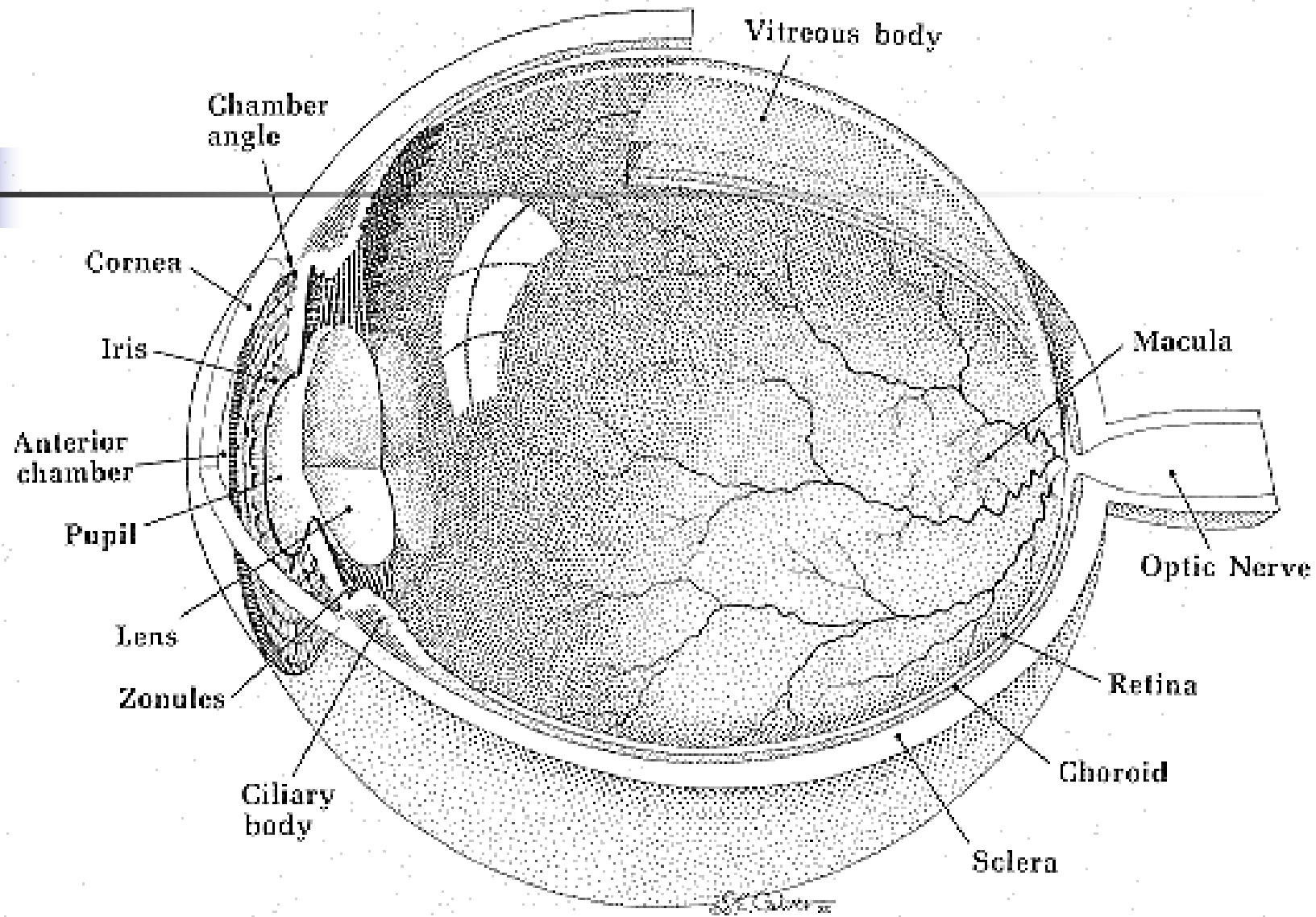
Vision

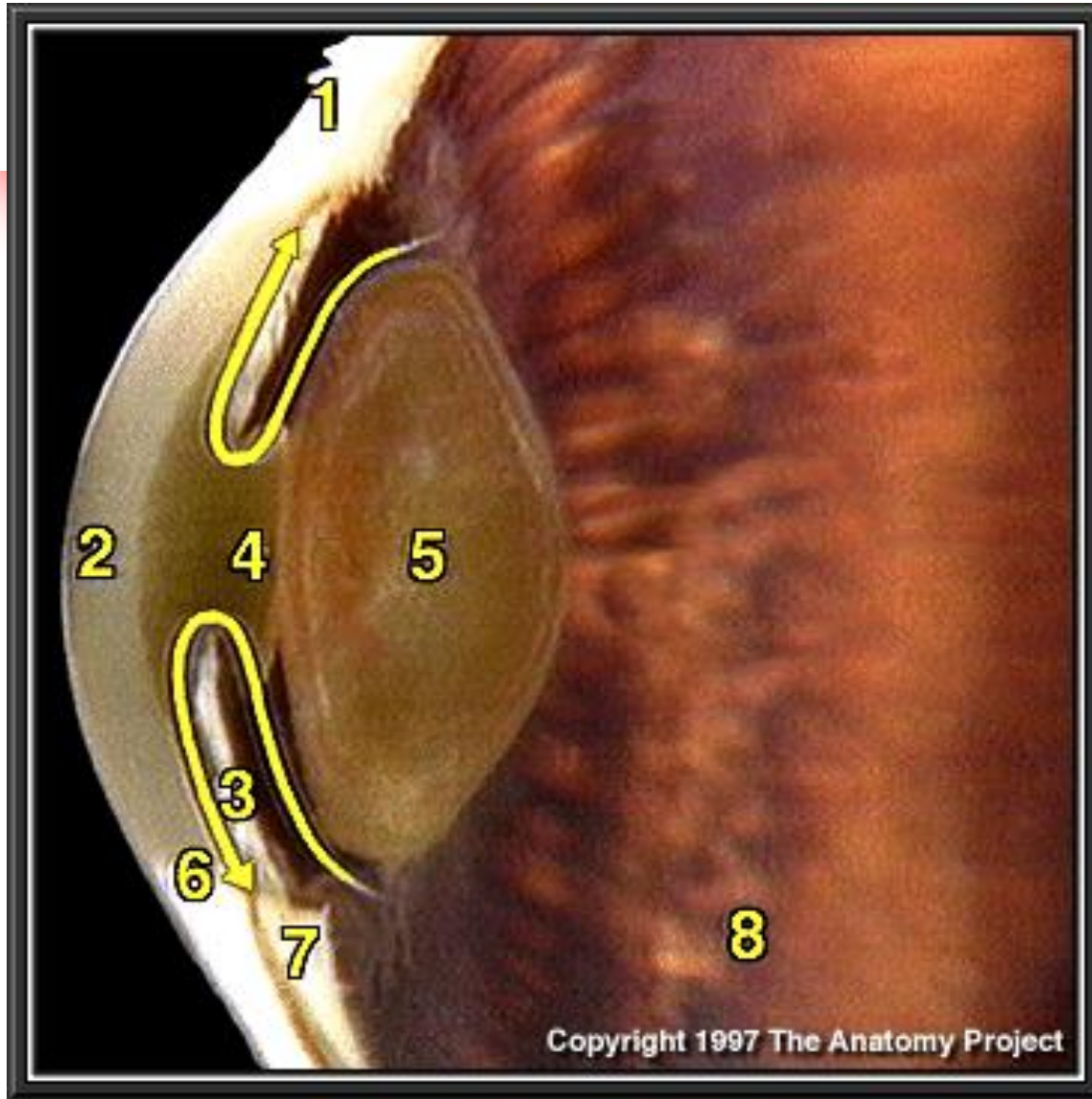


The Eyes









1. Sclera

2. Cornea

3. Iris

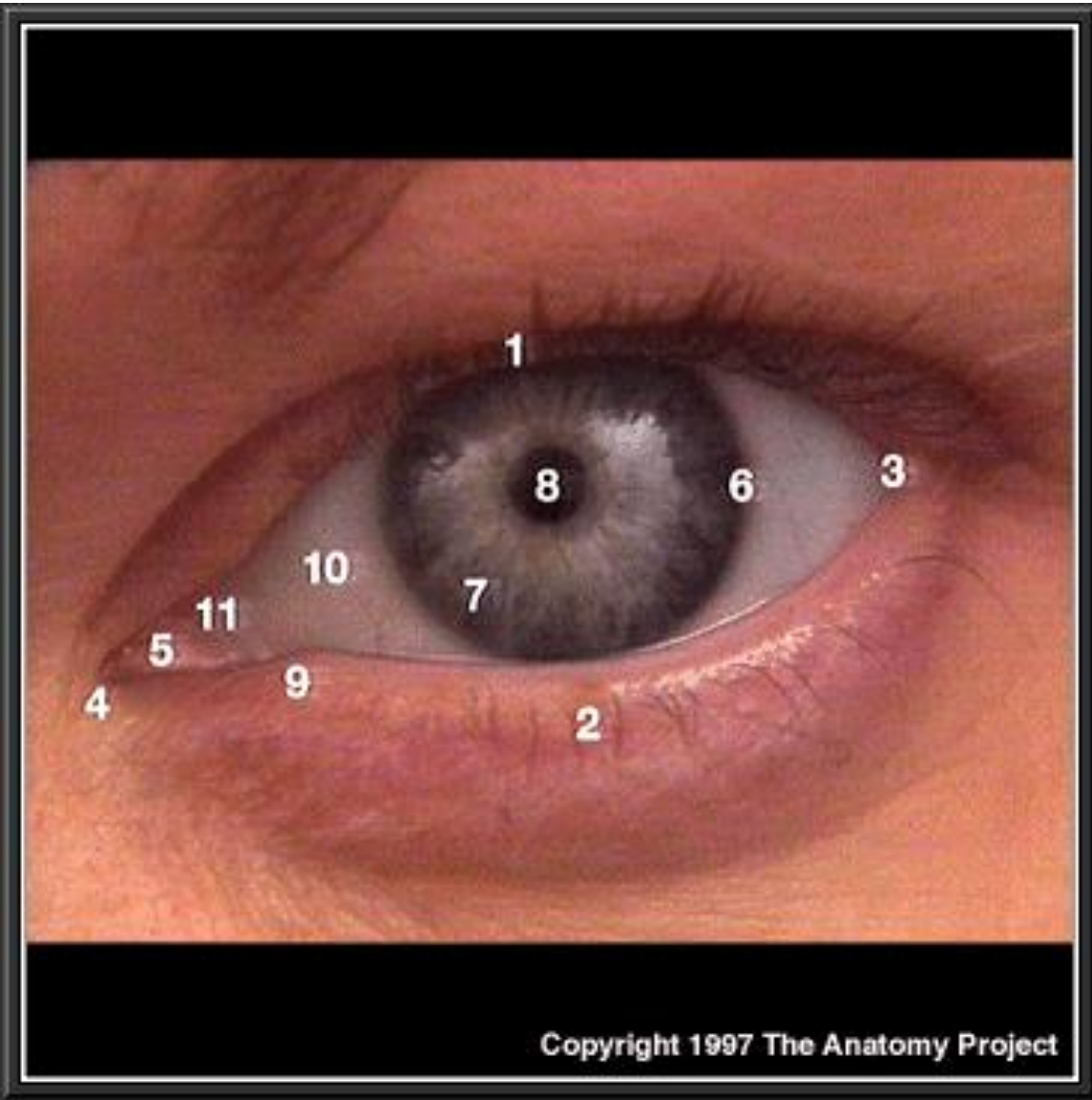
4. Pupil

5. Lens

6. Limbus

7. Ciliary body

8. Ora Serrata



1. Upper Lid
2. Lower Lid
3. Lateral Angle
4. Medial Angle
5. Lacrimal Caruncle
6. Limbus
7. Iris
8. Pupil
9. Lacrimal Papilla
10. Sclera
11. Plica Semilunaris



Follow a Photon

- A photon bounces off an object and speeds to your eye at 186,000 miles/sec. It speeds through your cornea, the clear dome on the surface of your eye. It is made out of squamous epi, only 5 - 7 cells thick. The photon moves through the anterior chamber which is filled with aqueous humor.



Follow a Photon

- The photon glances off the iris, the colored portion of your eye. The iris is made out of a circular ring of muscle surrounding a hole or opening in the eye called the pupil. The muscles can contract and make the pupil larger or smaller. The photon now streaks through the pupil.



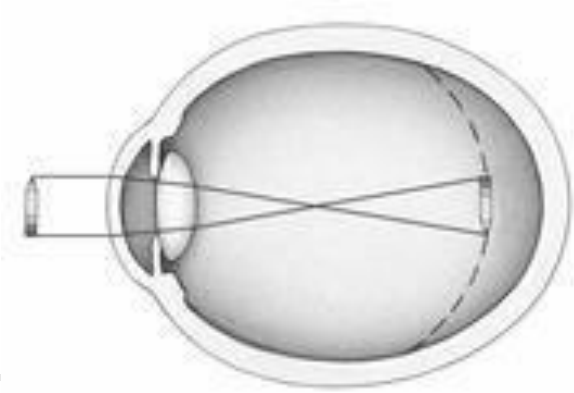
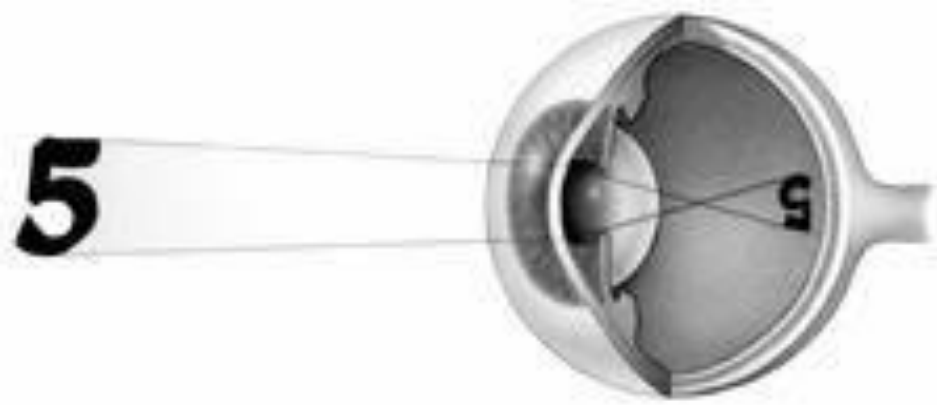
Follow a Photon

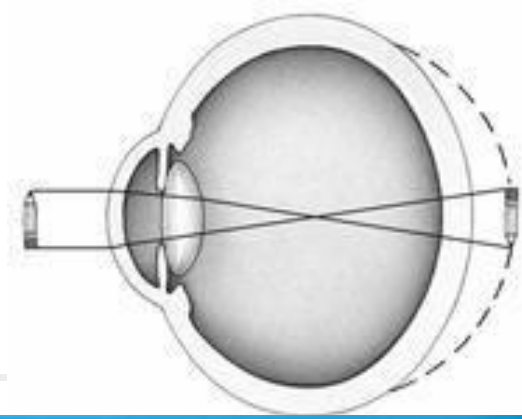
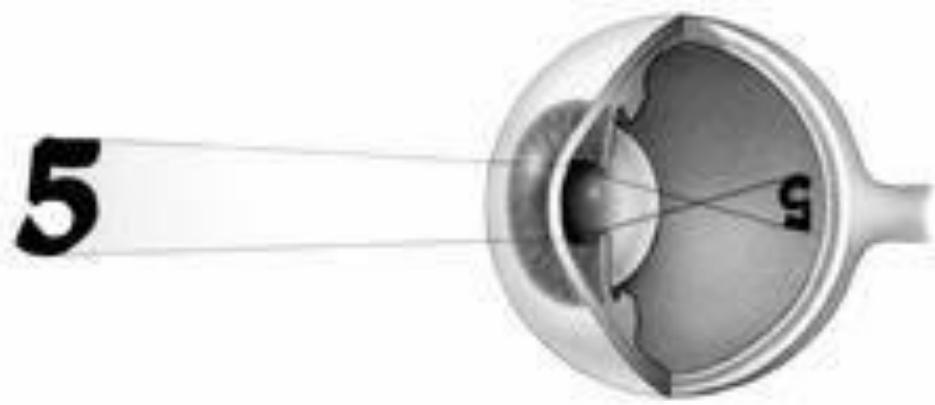
- The photon is now in the posterior chamber of your eye, also filled with aqueous humor. The photon passes through the clear lens where the photons and others like it get “focused”. Our focused photon now travels through the posterior cavity which is filled with a clear jelly - vitreous humor.



Follow a Photon

- Our photon now slams into the back wall of the eye, called the retina. The retina contains the photoreceptor cells or rods and cones that sense the photon and send an action potential to the brain where the brain “sees” the photon.





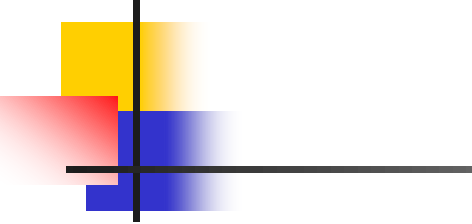


Figure 2 illustrates what a person with a refractive error called **myopia**, or nearsightedness, can see. People with myopia can see objects that are close by more clearly than they can see objects that are far away. Myopia is most common in children between the ages of 6 and 12. As a child's body grows rapidly, the eyeball grows longer. Eyeglasses that correct myopia are concave lenses.

Figure 3, **hyperopia**, or farsightedness, or farsightedness, illustrates what a person with hyperopia can see. People with hyperopia can see objects that are far away more clearly than they can see objects that are close by. Hyperopia is most common in older people. As a person's body grows older, the eyeball grows shorter. Eyeglasses that correct hyperopia are convex lenses.

Have you ever been asked by a doctor if you probably have **presbyopia**, or "old person's eyesight"?



Astigmatic cornea



Normal cornea



