

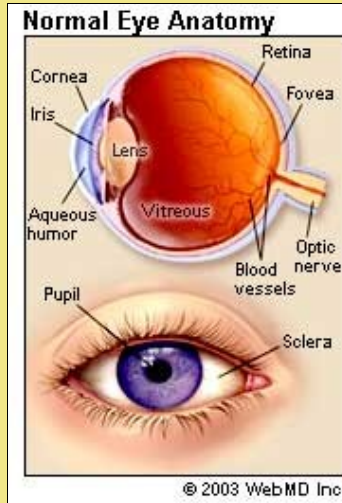
In Order to See, there Must be Light

Light reflects off an object and -- if one is looking at the object -- enters the eye.

The first thing light touches when entering the eye is a thin veil of tears that coats the front of the eye. Behind this lubricating moisture is the front window of the eye, called the cornea. This clear covering helps to focus the light.

On the other side of the cornea is more moisture. This clear, watery fluid is the *aqueous humor*. It circulates throughout the front part of the eye and keeps a constant pressure within the eye.

After light passes through the aqueous humor, it passes through the pupil. This is the central circular opening in the colored part of the eye -- also called the iris. Depending on how much light there is, the iris may contract or dilate, limiting



or increasing the amount of light that gets deeper into the eye. The light then goes through the lens. The lens of the eye focuses the light. The lens changes shape to focus on light reflecting from near or distant objects.

This focused light now beams through the center of the eye. Again the light is bathed in moisture - a clear jelly known as the vitreous. Surrounding the vitreous is the retina.

Light reaches its final destination in the photo receptors of the retina. The retina is the inner lining of the back of the eye. It's like a movie screen or the film of a camera. The focused light is projected onto its flat, smooth surface. Signals sent from the photoreceptors travel along nerve fibers to a nerve bundle which exits the back of the eye. The bundle is called the optic nerve. The optic nerve sends the signals to the visual center in the back of the brain.

Now light, reflected from an object, has entered the eye, been focused, converted into electro-chemical signals, delivered to the brain and interpreted or "seen" as an image.

In the March flyer, we will talk about "Why we need more light with age."

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