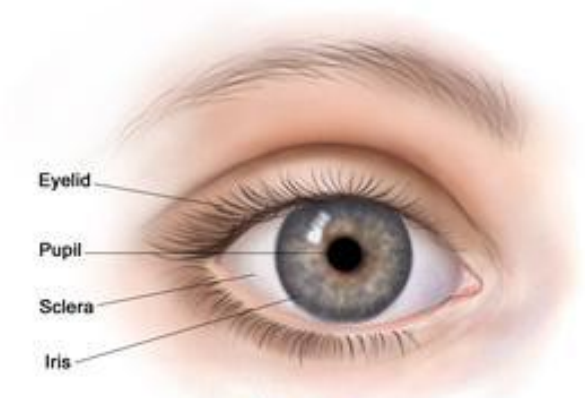


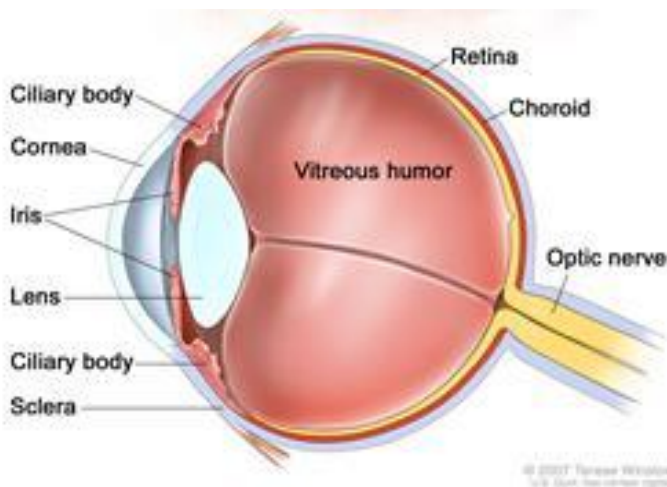
Eye Structure and Seeing Light—Notes Outline

Light _____ your eye through a _____ portion of the _____ (the tough, white, outer covering of the eye), called the _____. The cornea is _____, so it slightly _____ the light as it goes through. Light then passes through the _____ (a clear fluid used for _____ of the eye) and then through the _____.

The pupil is simply a _____ in the _____. The iris is a _____ that controls how _____ the pupil is. It is the _____ part of the eye. In low light, the iris _____ and the pupil gets _____; in bright light, the iris _____ and the pupil gets _____.



Directly behind the iris is the _____. This is the structure that can change _____ in order to _____ light so that we can see _____. Its shape is _____, meaning it curves _____ on both sides. The _____ muscles above and below the lens control the _____ of the lens.



Behind the lens is a clear gel called the _____. Light goes through this, then strikes the _____. This is the _____ on the inside of the _____ of the eye containing _____ types of cells sensitive to _____: _____ and _____. Rods sense _____ and _____ and can work in

_____ light. Cones sense _____, and must have a certain amount of light to work.

Name: _____ Date: _____

_____ kinds of cones: One senses _____ wavelengths of light, in the _____ range, and are called L-cones. The second type sense the _____ wavelengths of light, mainly in the _____ range, and are called _____. The third kind _____, and sense the shorter wavelengths of light, mostly in the _____ range.

The rods and cones send messages through the _____, which carries the information to the _____. The sight center of your brain is located in the _____, basically _____. This is why a blow to the back of your head can result in blindness or other vision problems.

Causes of Color Blindness

1. _____: You are born with these types. Sometimes a type of cone is _____, or the _____, that a cone recognizes is different than normal. L-cone and M-cone problems result in _____ color blindness (the _____ common type).
2. _____: These types occur after birth. For example, accidents involving the _____ of the brain, or Parkinson's Disease can cause _____ problems.

Source of images: National Cancer Institute at the National Institutes of Health
<http://www.cancer.gov/cancertopics/pdq/treatment/retinoblastoma/patient/page1/AllPages/Print>