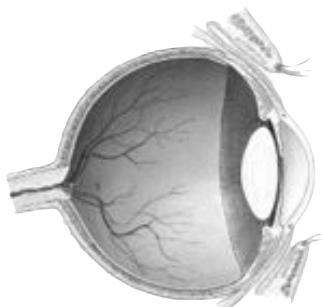


Lab 9

Vision, Hearing Ex 24, 25

1

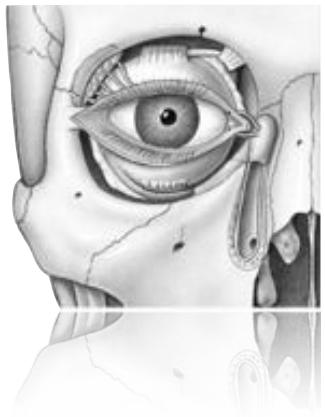
External Eye



- Eyelids
 - Eyelashes
 - Conjunctiva
 - mucous membrane
 - lines inside of eyelid and outer surface of eyeball

2

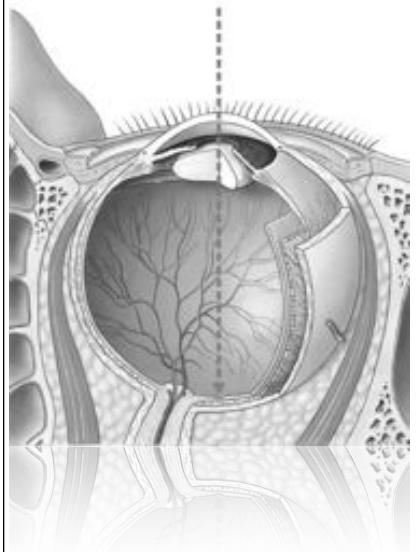
Lacrimal System



- Lacrimal Gland
 - produces tears
- Lacrimal Canals
- Lacrimal Sac
- Nasolacrimal Duct

3

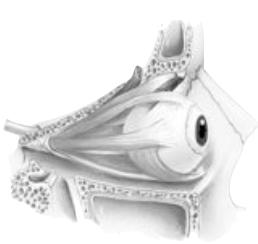
Layers of the Eye



- Sclera
 - fibrous layer
 - white of the eye
 - forms cornea anteriorly
- Choroid
 - vascular layer
 - dark pigment
- Retina
 - photoreceptor layer

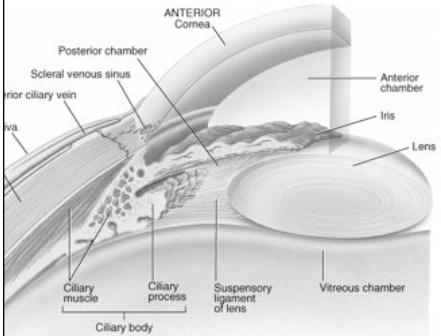
4

Eye Muscles



5

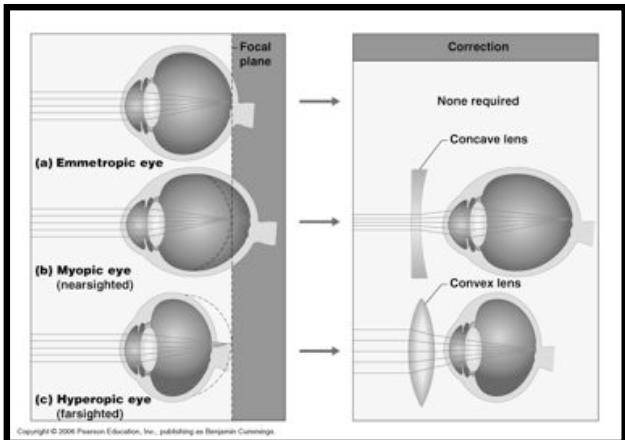
Focusing Light



- Refract (bend) light
 - cornea
 - lens
 - shape controlled by ciliary body
- Amount of light
 - iris
 - pupil is hole in the center

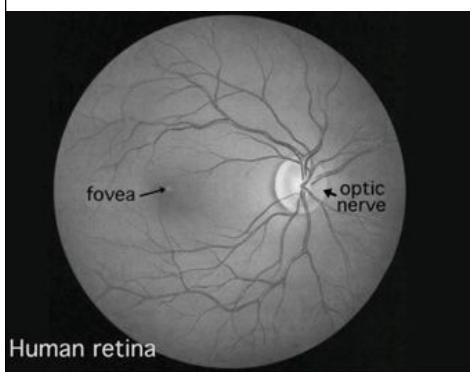
6

Visual Defects



7

Retina



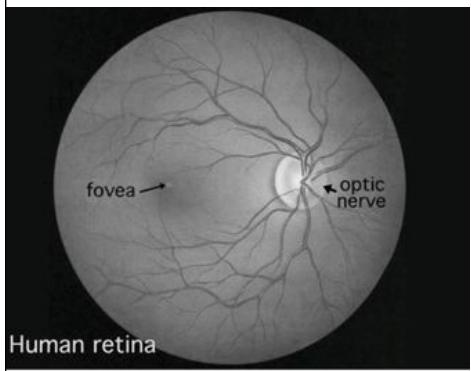
Human retina

g. 1. Human retina as seen through an ophthalmoscope.

- Sensory layer made of photoreceptors called rods and cones
- light focuses on the fovea
 - made up mostly of cones
- optic disc
 - area where optic nerve exits the eye
 - “blind spot”

8

Retina

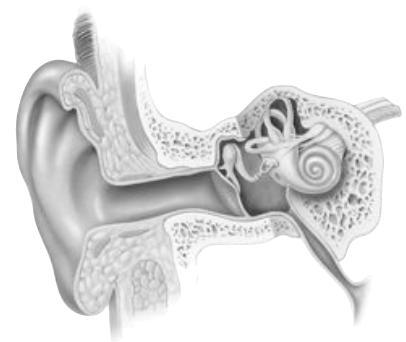


g. 1. Human retina as seen through an ophthalmoscope.

- Rods
 - photoreceptors that detect low light
 - grayscale, night vision
 - densest toward periphery
- Cones
 - photoreceptors used in bright light
 - color vision (RGB)
 - concentrated in fovea

9

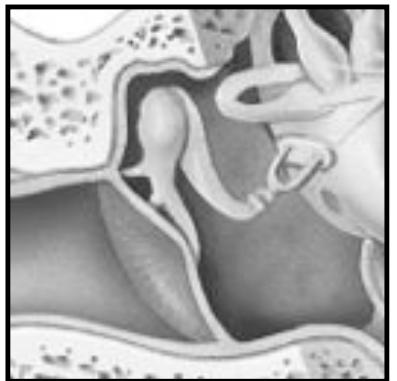
External Ear



- Pinna
- External ear canal
- Tympanic membrane
 - ear drum

10

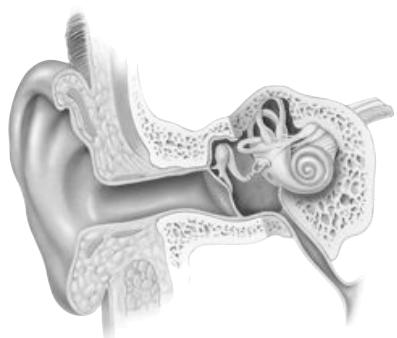
Inner Ear



- Ear Ossicles
 - malleus
 - incus
 - stapes

11

Inner Ear



- Vestibular Apparatus
 - semicircular canals
 - vestibule
- Cochlea
 - hearing

12