

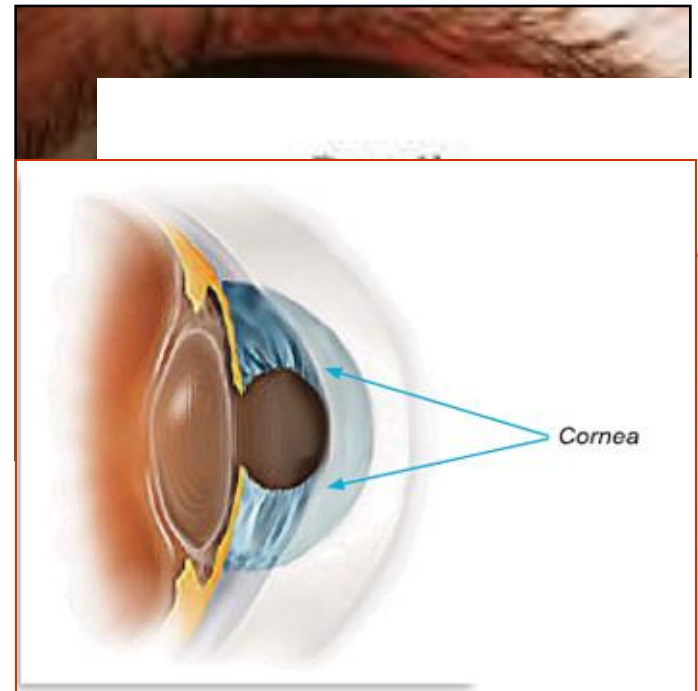


# **Special Senses: the Eyes & Ears**

**Units 12 & 13**

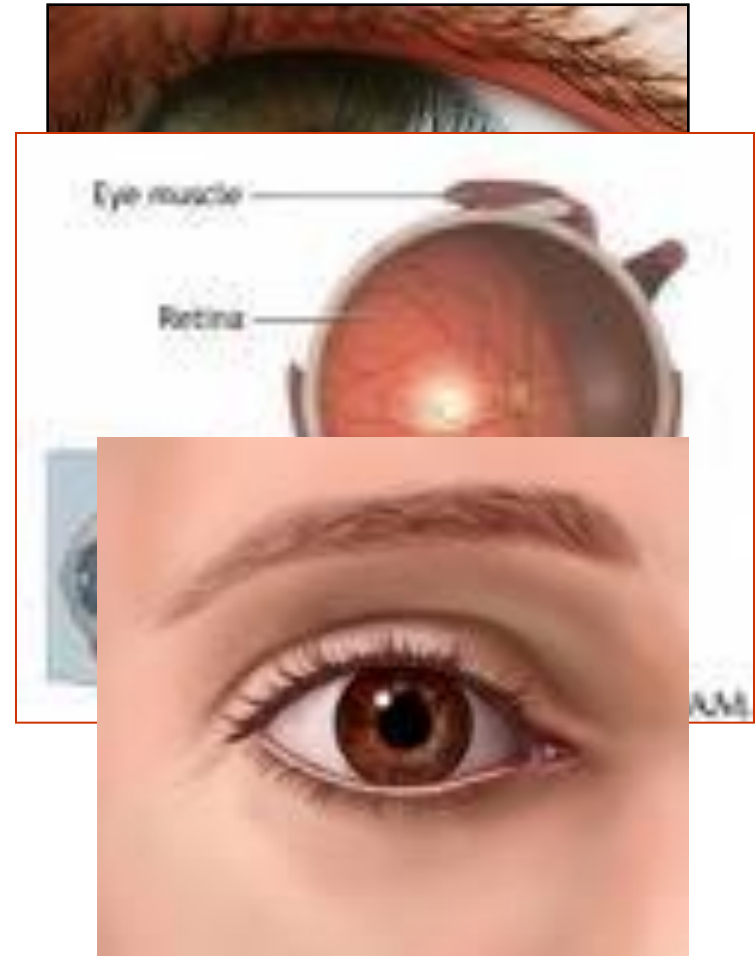
# Structure of the Eyes

- **opt/o, optic/o, ocul/o and ophthalm/o**
  - **eye(s) or vision**
- **corne/o & kerat/o = cornea**
  - **transparent, outer layer of eye**
  - **maintains shape and protects the inner portion**
- **cor/o & pupill/o = pupil**
  - **black circular portion of eye**
  - **permits light to enter the eye**



# Structure of the Eyes

- **ir/o = iris**
  - colored portion of the eye
  - surrounds the pupil
- **retin/o = retina**
  - converts images into electrical impulses
  - transmits images to the brain
- **blephar/o = eyelid**
  - protects the eye from foreign matter, excessive light, and impact



# Structure of the Eyes

- **conjunctiv/o = conjunctiva**
  - mucous membrane lining of the eyelid and sclera
- **scler/o = sclera**
  - white of the eye
- **dacry/o = tear, tear duct**



# Pathology of the Eyes

- **cataract** (KAT-ah-rakt)
  - the clouding of the lens of the eye



- **glaucoma** (glaw-KOH-mah)
  - the loss of peripheral vision
  - “tunnel vision”

# Pathology of the Eyes (cont.)

- **strabismus** (strah-BIZ-mus)
  - crossing of the eyes
  - “lazy eye”
  - disorder in which eyes can not be directed toward the same object
- **astigmatism** (ah-STIG-mah-tizm)
  - unequal curvature of the cornea
  - causes eye to not focus properly; vision problems



# Pathology of the Eyes (cont.)

- **hyperopia**

- **hyper** = excessive, increased
- **opia** = vision condition
- “farsightedness”; most common after the age of 40



- **myopia**

- **my/o** = muscle
- **-opia** = vision condition
- “nearsightedness”; commonly detected in school-age children



# Pathology of the Eyes (cont.)

- **diplopia**
  - **dipl/o** = two, double
  - **double vision**
- **monochromatism**
  - **mono-** = one
  - **chromat/o** = color
  - **-ism** = condition
  - **“color blindness”**
- **nyctalopia**
  - **nyctal/o** = night
  - **“night blindness”**





# Pathology of the Eyes (cont.)

- **cryoretinopexy**
  - cry/o = cold
  - -pexy = surgical fixation
  - “surgical fixation of the retina by using extreme cold (carbon dioxide)”

- **photophobia**
  - phot/o = light
  - -phobia = fear of
  - “abnormal fear of or sensitivity to light”

- **ophthalmoplegia**
  - ophthalm/o = eye
  - -plegia= paralysis
  - “paralysis of the eye muscle”



- **conjunctivitis**
  - conjunctiv/o = conjunctiva
  - --itis= inflammation
  - “pink eye”

# Pathology of the Eyes (cont.)

- **PERRLA**
  - pupils are equal, round, responsive to light and accommodation



# Structure of the Ears

- **aur/o**

- **aur/i**

- **ot/o**

**ears**

- **acous/o**

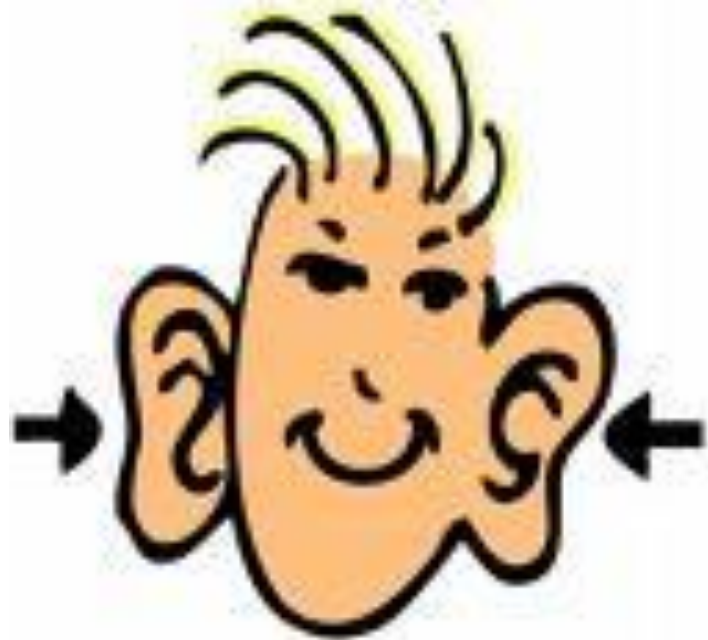
- **audi/o**

**hearing**



# Structure of the Ears

- **tympanic membrane**
  - tympan/o = eardrum
  - transmits sound vibrations
- **cochlea**
  - cochle/o
  - snail-shaped portion that contains organ of hearing



# Pathology of the Ears

- **otitis media**
  - inflammation of the middle ear
  - usually associated with an URI in children
- **vertigo**
  - dizziness, whirling, loss of balance
- **tinnitus**
  - ringing, buzzing, or roaring sound in the ear
- **presbycusis (pres-beh-KOO-sis)**
  - a progressive hearing loss occurring in old age



# Build-a-Word Terms...

- **PERRLA**
- **corneal**
- **blepharoptosis**
- **cornealiritis**
- **otalgia**
- **retinal**
- **otopyorrhea**
- **otorrhagia**
- **otitis**
- **blepharitis**
- **audiologist**
- **ophthalmologist**
- **otomycosis**
- **keratoplasty**
- **otoplasty**
- **oculomycosis**
- **optometrist**
- **otolaryngologist**
- **aural**
- **acoustic**