

Health Assessment

Eye & Ear Study Guide

EYE

Visual pathway

Objects reflect light, light rays are refracted through the transparent media and strike the retina.

Retina transforms the light stimulus into nerve impulses that are conducted through the optic nerve & the optic tract to the visual cortex of the occipital lobe.

- Image formed on the retina is upside down and reversed from its actual appearance in the outside world.

Extraocular muscles

- Give the eye both straight & rotary movement

Superior Rectus: cranial nerve III (oculomotor)

Inferior Rectus: cranial nerve III (oculomotor)

Lateral Rectus: cranial nerve VI (abducts the eye) (abduces)

Medial Rectus: cranial nerve III (oculomotor)

Superior Oblique: cranial nerve IV (trochlear) (innervates)

Inferior Oblique: cranial nerve III (oculomotor)

Reflexes

Pupillary Light Reflex: normal constriction of the pupils when bright light shines on the retina

Fixation: eye toward an object attracting a person's attention and focusing on that object

Accommodation: looking far away at one object & then switching quickly to a very close object.