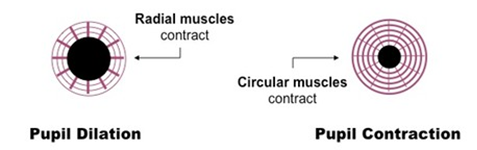
Notes: Eye Reflexes

A healthy person has a number of eye reflexes:

* \_
* \_
* \_
* \_

**Pupillary Light Reflex**

* The reflex that controls the of the pupil (its )
* This is a response to of light (brightness)
* Allows us to adapt to different light levels
  + \_ light → pupil
  + \_ light → pupil



**Vestibulo-ocular reflex**

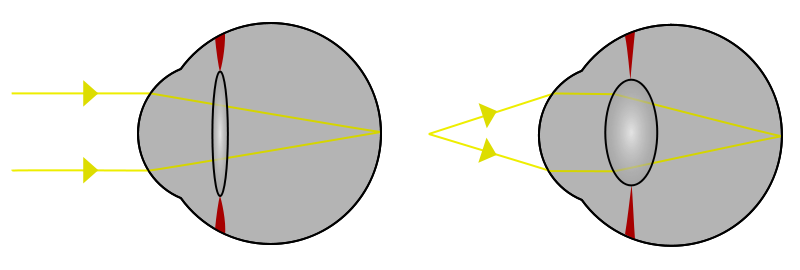
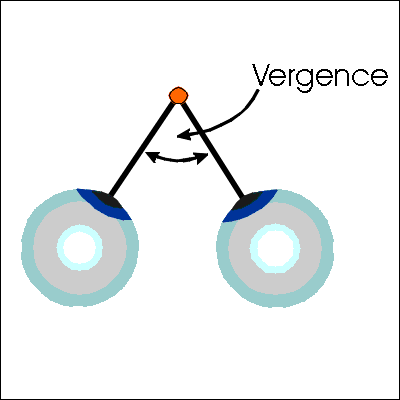
* Sometime called the “doll’s head reflex”
* Links eye movement with the
  + The system that controls and
* Trying to image on the retina during head movement by moving the eyes in the direction of head movement
  + This way the image stays in the centre of the field of vision

**Corneal Reflex**

* Also known as the
* Caused by the stimulation of the
  + Example: when something your eye or
  + Can also happen with really
* Trying to the eye from foreign bodies and bright light

**Accommodation Reflex**

* How the eye on near and far objects
  + Changes in , lens and pupil



This you need to know for the test!

# Reflexes

|  |  |
| --- | --- |
| Reflex | Personal Example |
| Pupillary Reflex | |
| Near /Far   * You look \_\_\_\_\_\_\_\_\_\_\_\_\_ pupil is \_\_\_\_\_\_ * You look \_\_\_\_\_\_\_\_\_\_\_\_\_ the pupil is \_\_\_\_\_\_   Light/ Dark   * + In \_\_\_\_\_\_\_\_\_\_\_\_\_ your pupils get \_\_\_\_\_\_\_\_\_\_\_\_\_, so less light will get in   + In \_\_\_\_\_\_\_\_\_\_\_\_\_ your pupils get \_\_\_\_\_\_\_\_\_\_\_\_\_ to let in more light.   Love/Hate   * + Your pupils get \_\_\_\_\_ when you look at someone you \_\_\_\_\_\_\_\_\_\_ (or have a crush on).   + They get \_\_\_\_\_when you look at someone you \_\_\_\_\_\_\_ | **Near /Far**   * You look at the board pupil is big. * You look at you paper, pupil is small   **Light/ Dark**  **Love/Hate** |
| Adaptation | |
| * In \_\_\_\_\_\_\_\_\_\_\_\_\_your retina uses the \_\_\_\_\_\_\_\_\_\_\_\_\_ * In \_\_\_\_\_\_\_\_\_\_\_\_\_your retina uses the \_\_\_\_\_\_\_\_\_\_\_\_\_ * It takes about ten seconds to switch from one to the   other | * You are playing outside in the snow and you come inside and it’s so dark it’s hard to see but after a few seconds it seems normal again. * You are at a matinee movie and you come outside into the sun. It’s so bright it hurts your eyes. But then you get used to it. |
| After Images | |
| Negative after images   * + Look at a \_\_\_\_\_\_\_\_\_\_\_\_that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   + When you look at a paper you see the \_\_\_\_\_\_\_\_\_\_\_\_ colour.   Positive after images   * + Look at a \_\_\_\_\_\_\_\_\_\_\_\_   + Close your eyes and you can still see them. Your retina is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and keeps firing | * Look at red for a long time then look at a white paper. You see green |
| Peripheral Vision | |
| Peripheral vision   * If you are looking \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_but can still see something \_\_\_\_\_\_\_\_\_\_\_\_ you.   Movement vs colour   * Most of your retina is covered with \_\_\_\_\_\_\_\_\_so you can see \_\_\_\_\_\_\_\_\_\_\_\_ first. * Your \_\_\_\_\_\_\_\_are only in the \_\_\_\_\_\_\_\_\_\_\_\_. You can see \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_before \_\_\_\_\_\_\_\_\_\_\_\_ |  |
| Reflexes with 2 eyes | |
| Binocular vision   * your \_\_\_\_\_\_\_\_\_\_\_sees a slightly different picture from your \_\_\_\_\_\_\_\_\_\_\_. * Your brain sees these two images and interprets them as \_\_\_\_   Blind spot   * Each eye has a \_\_\_\_\_\_\_\_\_\_\_where the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ leave the eyes. * They’re in \_\_\_\_\_\_\_\_\_\_\_ places in each eye. As long as you have two eyes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | * It’s hard to thread a needle with just one eye. |
| Near point accommodation | |
| Convergence   * When you look at something \_\_\_\_\_\_\_\_\_\_\_your medial rectus muscles bend your eyeballs \_\_\_\_\_\_\_\_\_\_\_ * When you look \_\_\_\_\_\_\_\_\_\_\_the muscles relax and your eyeballs are \_\_\_\_\_\_\_\_\_\_\_ | * You can hold your arm up and cover the moon with your thumb. * But the brain knows one is close and the other is far because it feels the muscles move. |