

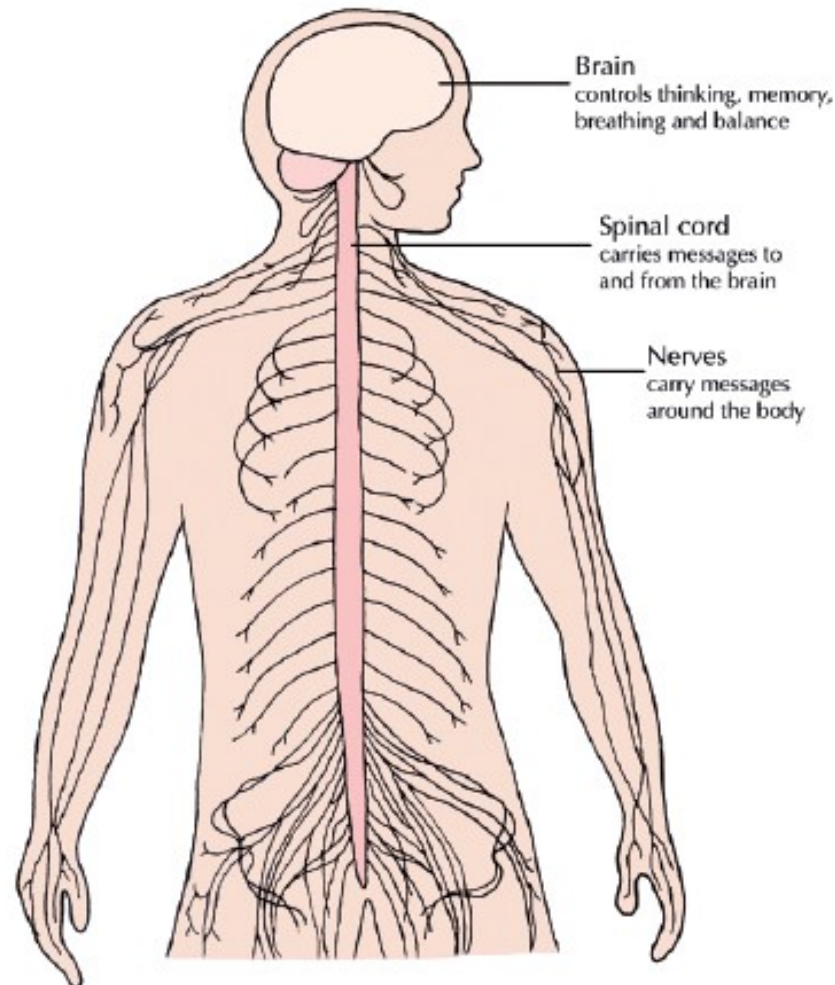
Chapter 9: Senses and Nervous System

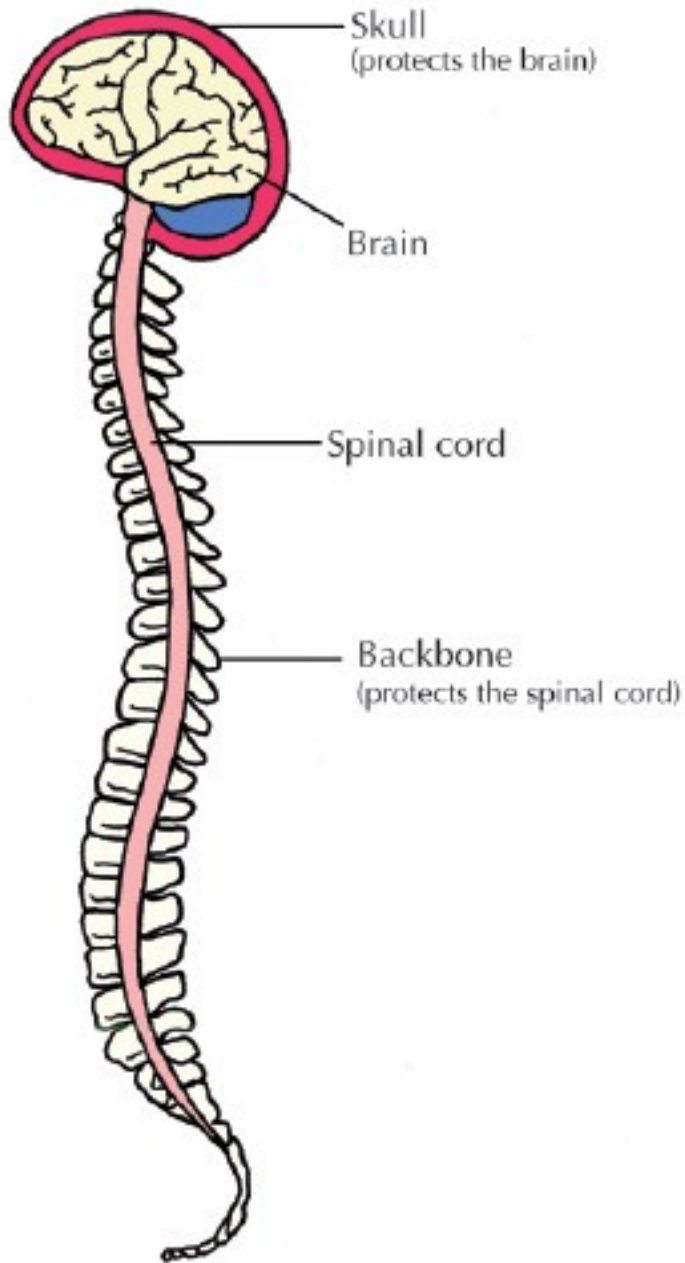
	SENSE	SENSE ORGAN
1	Sight	Eye
2	Hearing	Ears
3	Smell	Nose
4	Taste	Tongue
5	Touch	Skin

Nervous System

Consists of the **Brain** and **Spinal Cord** (Central Nervous System)

Also nerves that run throughout the body from the spinal cord





Nerves.

Nerves come in bundles called neurons and can be up to a metre long.

Nerves go to every part of the body, sending signals back to the Brain.

How Does it Work??

e.g. You see a man with a gun walking towards you from a distance.

Your eye sends a message through the Sensory Nerve to the Brain.

The Brain decides that you are in danger and sends another message along the Motor Nerve to the muscles in your legs to run.

This only takes milliseconds

Sensory nerves carry messages to the Brain

Motor nerves carry messages away from the Brain

How Does it Work 2??

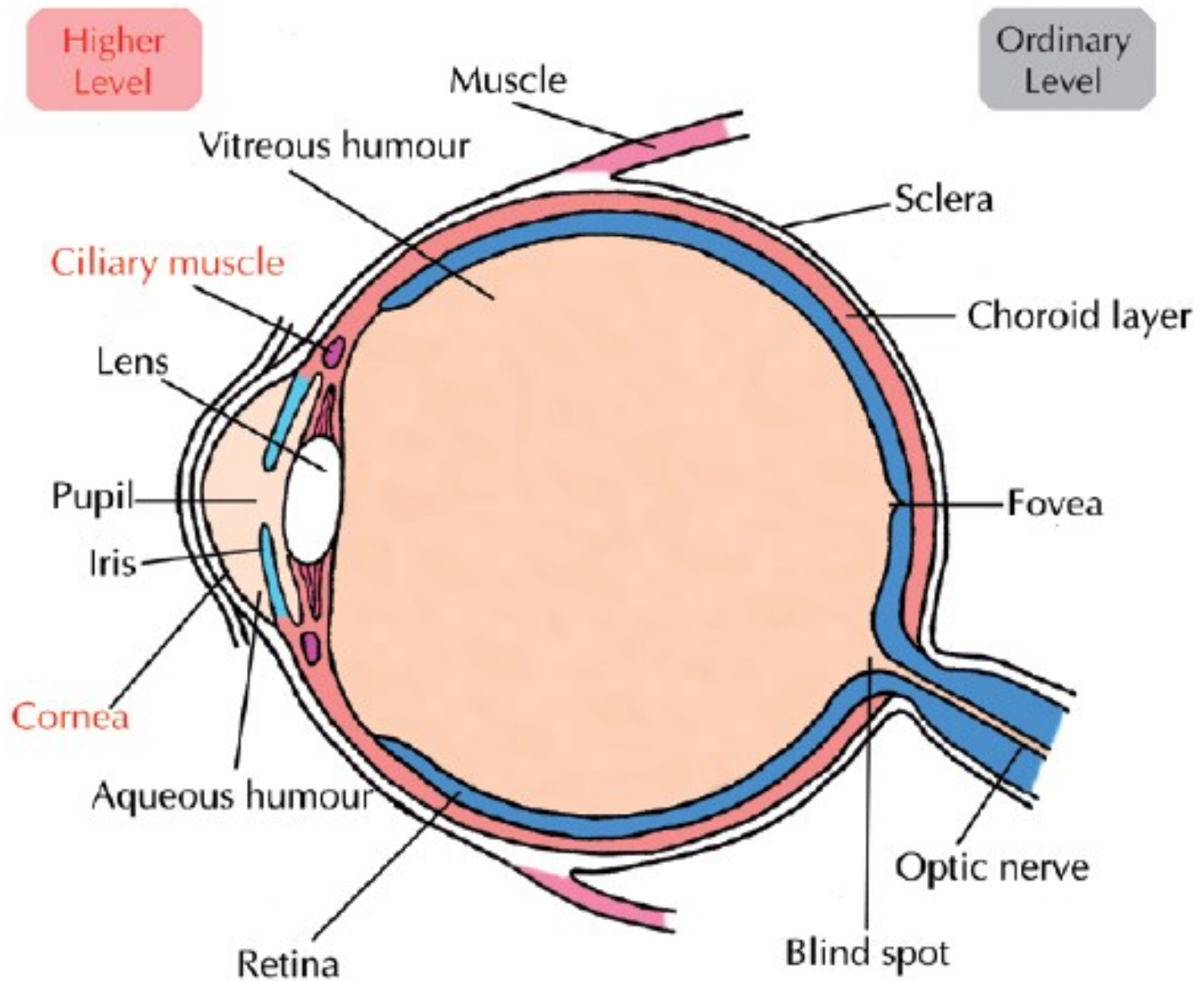
e.g. You put your hand under very warm water from a tap.

This is different!!!

Here a message is sent through the sensory nerve to your spinal cord. From here another message is sent to the motor nerve to remove your hand.

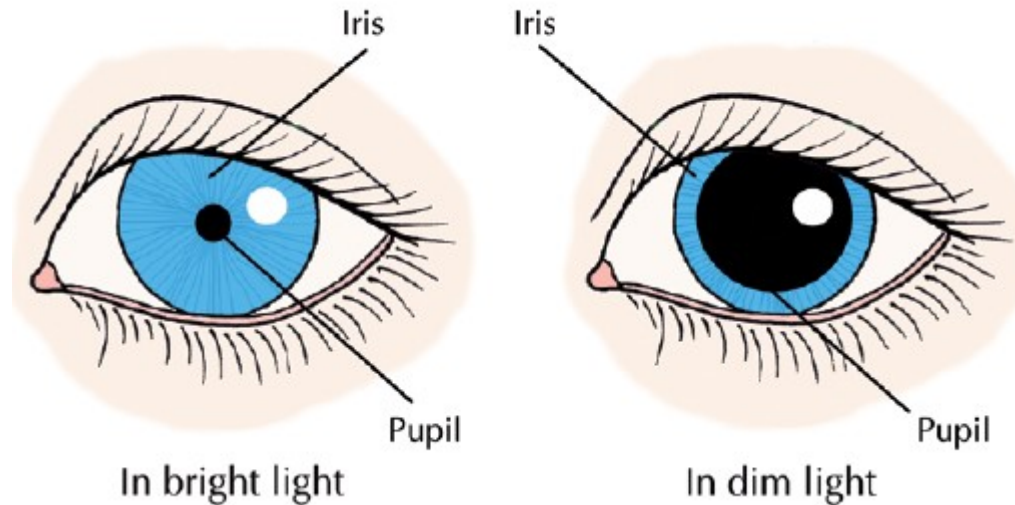
This is called a **Reflex action**. (happens when you have no time to decide)

The Eye.



Light enters the eye through the cornea and gets focused by the lens to the retina.

The retina gathers this light information and sends a message to the brain through the optic nerve.



The Iris controls how much light enters the eye. In bright light it closes and in dim light it gets bigger.

The Lens focuses the image onto the retina. The Ciliary muscle pulls the lens to change the focus.