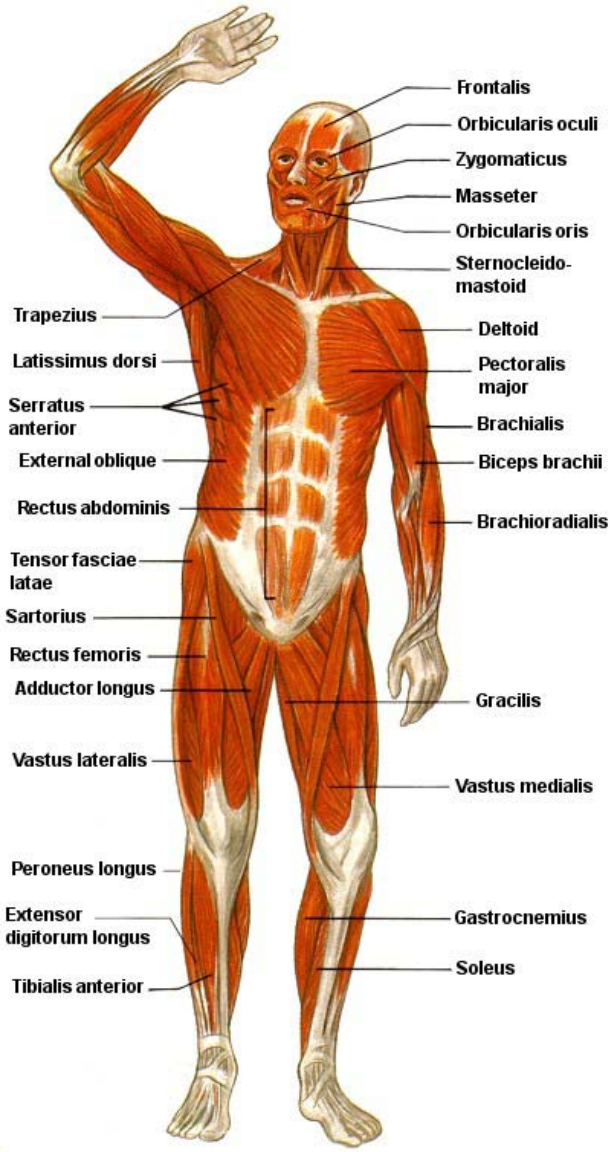
There are two main types of muscles:

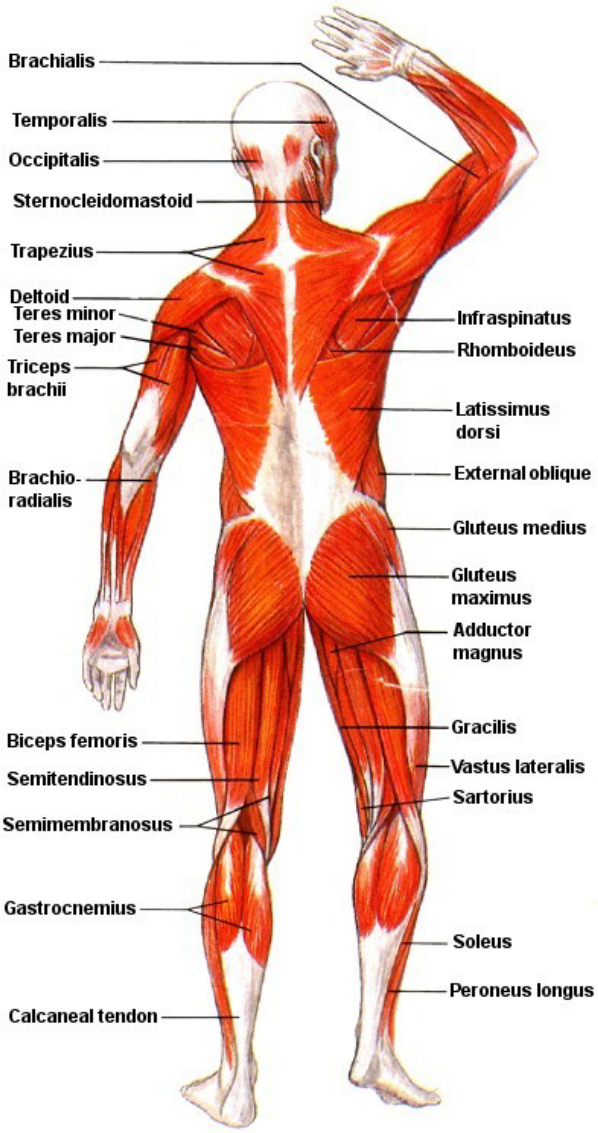
Voluntary muscles	These muscles are controlled by the central nervous system and are under the control of the will. An example of these muscles would be those that are used in walking.
Involuntary muscles	These muscles are controlled by the autonomic nervous system and are not under the control of the will. An example of these would be those involved with movements of the respiration and digestion systems.
Cardiac muscles	These muscles are only found in the heart. These show a combination of voluntary and involuntary muscles.

Muscle performs the function of movement by means of the following movements:

Gliding	>	Sliding
Flexion	>	Bending
Extension	>	Straightening
Rotation	>	Turning
Adduction	>	Movement towards the midline
Abduction	>	Movement away from the midline
Inversion	>	Turning foot inward
Eversion	>	Turning foot outward
Circumduction	>	This involves the full range of elbow movements



Anterior view



Posterior view

THE NERVOUS SYSTEM

The nervous system is concerned with the integration and control of all bodily functions. It makes it possible for us to be aware of our environment and to respond to changes within that environment.

It consists of the brain, spinal column and nerves. Some of these carry messages from the tissues to the brain and others from the brain to the tissues.

Incoming messages are carried by sensory nerves and the brain is able to interpret such messages in the light of experience. Outgoing messages from the brain are carried by motor nerves and result in movement and activity.

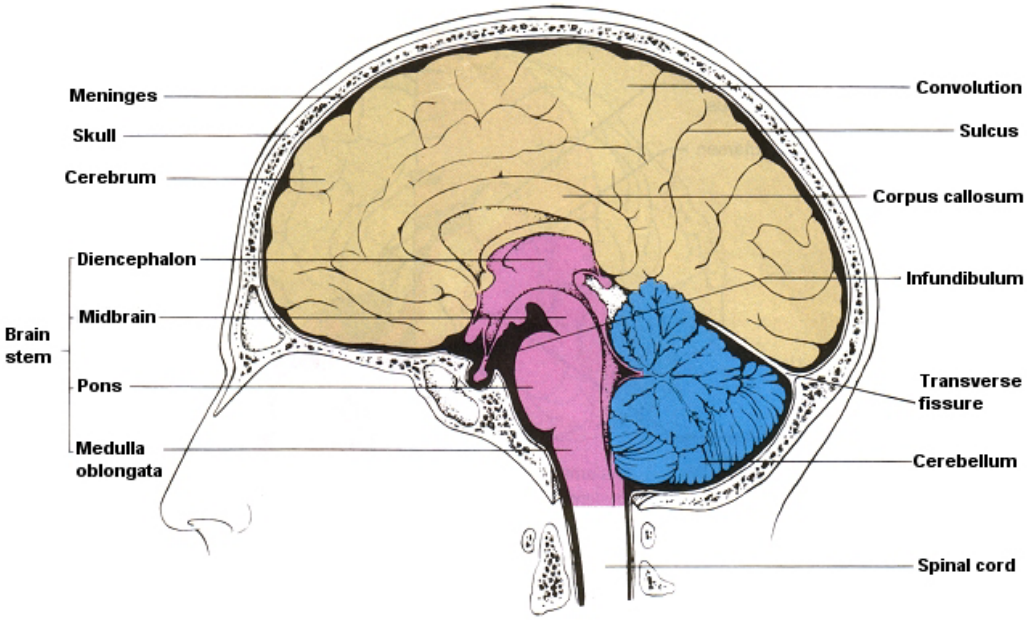
The Central Nervous System consists of:

- The Brain and Cranial Nerves
- The Spinal Cord and Spinal Nerves

The Brain

There are three parts to the brain:

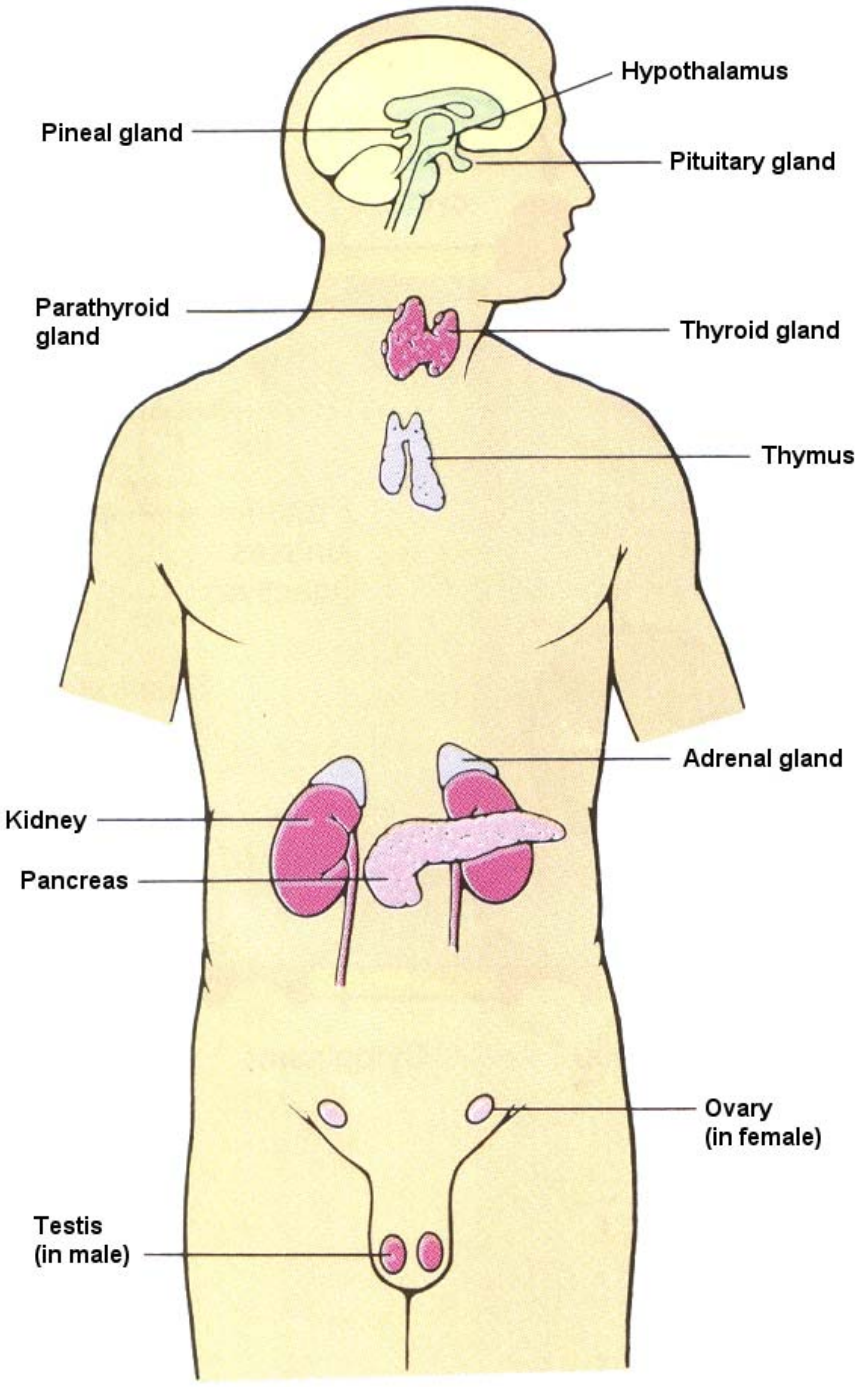
- The Cerebrum
- The Cerebellum
- The Brain Stem



THE ENDOCRINE SYSTEM

Endocrine glands are ductless glands, so called because the secretions they make do not leave the glands through ducts, but pass directly into the blood circulating through the substance of the glands.

The active principle of the secretion of an endocrine gland is called Hormone. Some glands produce a single hormone, whereas others produce two or more.



The following is a list of endocrine glands:

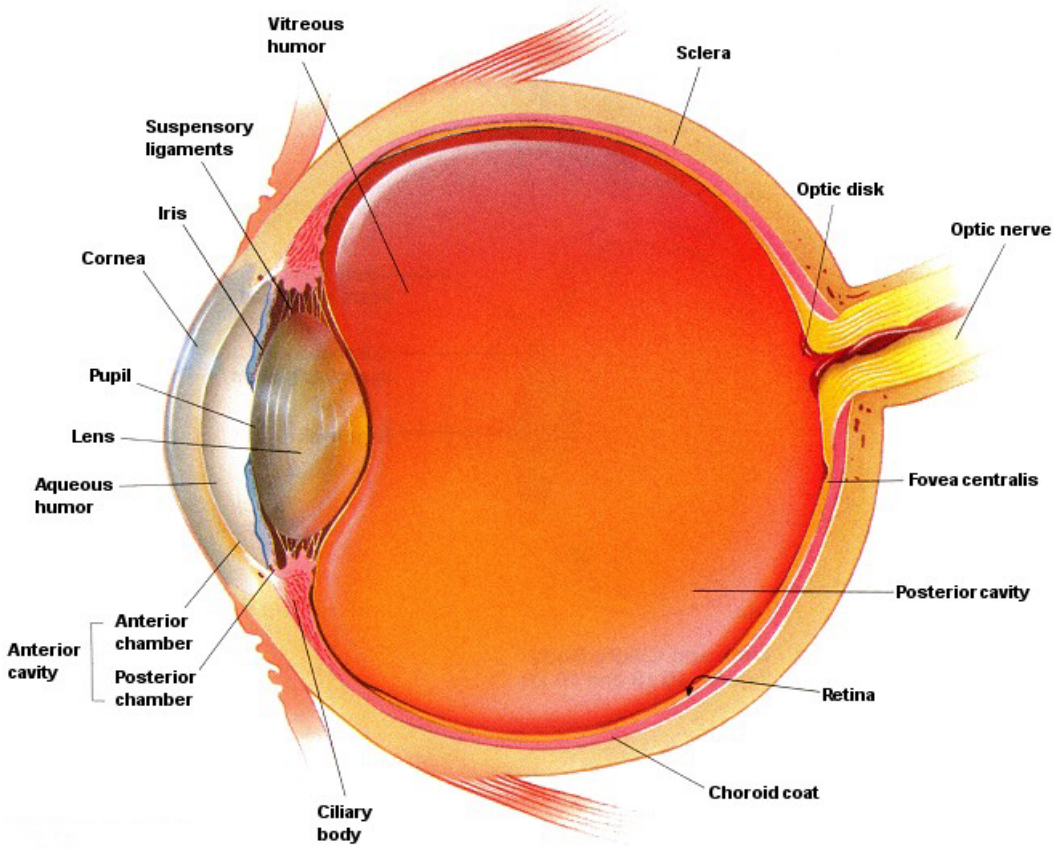
- Pineal
- Pituitary
- Thyroid
- Parathyroid
- Adrenal
- Parts of the Pancreas
- Parts of the Ovaries and Testes

THE SPECIAL SENSES

The special senses are taste, touch, smell, pain, temperature, sight and hearing.

THE EYE (ORGAN OF SIGHT)

The eye receives rays of light reflected from objects stimulating the nerve ending in the eyeball. The optic nerve receives these impulses and carries them to the occipital lobe of the cerebral cortex where they are interpreted. The eye is almost spherical in shape and lies in the cone-shaped orbit of the skull, protected by the eyelids anteriorly and a pad of fat posteriorly. The eyeball is attached to the orbit by six small muscles which move the eye in all directions. Both eyes move simultaneously.



The eye has a jelly like centre covered by three outer coats, namely:

- The Sclera and Cornea
- The Choroid (iris)
- The Retina