**Anatomy** is the study of the structure and relationship between body parts.

**Physiology** is the study of the function of body parts and the body as a whole.

**Anatomical position:** The body is erect and the arms are hanging at the sides of the body with the palms forward and the thumbs pointing away.

**Superior:** Above; at a higher level (towards the head)

**Inferior:** Below; at a lower level

**Anterior:** the front; before (Ventral)

**Posterior:** the back; behind (Dorsal)

**Medial:** towards the body's longitudinal axis (the middle; mid-sagittal plane)

**Lateral:** away from the body's longitudinal axis (away from the midline)

**Ipsilateral:** on the same side of the body

**Contralateral:** on the opposite side of the body

**Caudal:**  directed toward or situated in or near the tail (buttocks)or posterior part of the body.

**Cephalad**: directed toward or situated in or near the head or anterior section

**Intermediate:** between two structures

**Proximal:** towards an attached base (Heart)

**Distal:** away from an attached base (Heart)

**Superficial:** At, near, or relatively close to the body surface

**Deep:** farther from the body surface

**PLANES:**

**The human body can be divided into various sectors, with the dividing lines represented by planes.**

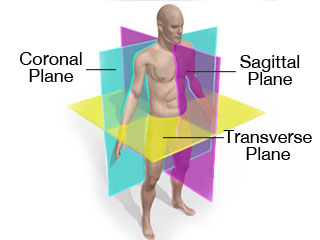
**sagittal plane:** runs longitudinally and divides the body into right and left portions

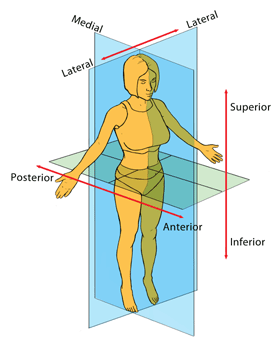
**midsagittal plane:** runs along the midline and divides the body into equal left and right portions.

**Parasagittal** **plane:** which is parallel to midline but does not divide into equal left and right portions.

**frontal (coronal) plane:** runs longitudinally and divides the body into posterior and anterior portions (front and back)

**transverse plane:** runs horizontally and divides the body into superior and inferior portions( upper and lower)





Review:

The shoulders are \_\_\_\_\_\_\_\_\_ to the hips.

superior

The feet are \_\_\_\_\_\_\_\_ to the hips.

inferior

The navel is on the \_\_\_\_\_\_\_\_ surface of the trunk.

anterior

The kidneys are \_\_\_\_\_\_\_ to the small intestines.

posterior

The heart is \_\_\_\_\_\_ to the lungs.

medial

Moving \_\_\_\_\_\_\_ from the nose is the eyes.

laterally (lateral)

The elbow is \_\_\_\_\_\_\_\_ to the shoulder and wrist.

intermediate

The thigh is \_\_\_\_\_\_\_ to the foot.

proximal

Each foot is \_\_\_\_\_\_ to each knee.

distal

The scalp is \_\_\_\_\_\_ to the skull.

superficial

The brain is \_\_\_\_\_ compared to the skull which surrounds it.

Deep

**Sagittal plane midsagittal plane Parasagittal** **plane** **frontal (coronal) plane transverse plane**

A: runs longitudinally and divides the body into posterior and anterior portions (front and back)

B: runs along the midline and divides the body into equal left and right portions.

C: runs longitudinally and divides the body into right and left portions

D: runs horizontally and divides the body into superior and inferior portions( upper and lower)

E: which is parallel to midline but does not divide into equal left and right portions.