

# Describe the organization of the human body

Anatomical Position

# Body Parts/Areas

- Identify body parts/areas on handout

# Anatomical Position

- Position in which we are standing upright, hands at our sides, palms facing forward, and thumbs pointed outward
- Why is this important??

# Directional Terms

- ◉ Superior/Cephalic/Cranial
  - > toward the head, going up
  - > cephalic is used more when dealing w/four legged creatures and embryology

Only used to describe locations on the “body” not extremities

# Directional Terms....

## ◉ Inferior/Caudal

- > Towards the feet, going down
- > Caudal is used more when dealing with four legged creatures as well
- > Only used to describe locations on the “body” not extremities

# Directional Terms...

- ◉ Anterior/Ventral
  - > The front of the body – belly side

# Directional Terms...

- ◉ Posterior/Dorsal
  - > Toward the back of the body
  - > Think of the dorsal fin on a fish

# Directional Terms...

## ◉ Medial

- > Near to the Midline of the body
- > Towards the sternum
  
- > Used to describe areas of the “body” and the extremities



# Directional Terms...

## ◉ Lateral

- > Towards the outside of the body
- > Going away from the midline
  
- > Used to describe areas of the “body” and the extremities

# Directional Terms...

## ● Proximal

- > Towards the point of origin
- > Examples: phalanges
- > Usually only referred to areas on the extremities

# Directional Terms...

- Distal

- > Away from the point of origin
- > Distant, away
- > Used to describe areas on the extremities

# Directional Terms...

- Ipsilateral
  - > Same Side
- Contralateral
  - > On the opposite side of the body

# Directions in the body

- ◉ Erect = standing upright
- ◉ Supine = lying on the back or on the dorsal surface
- ◉ Prone = lying face down or on the ventral surface
- ◉ Superficial = near the surface
- ◉ Deep = away from or below the surface
- ◉ Internal = within the body
- ◉ External = outside the body or part

# Planes of Division

- Sagittal

- > Cuts the body into right and left halves
- > Midsagittal = cut is exactly at midline
- > Parasagittal = cut is not exactly at midline

# Planes of Division...

- Frontal/Coronal
  - > Divides the body into anterior and posterior sections

# Planes of Division...

- Transverse/Horizontal

- > Divides the body into a superior and inferior
- > Chicago Museum of Science and Industry – stairwell
- > Used in MRI and CT imaging

- > Dissection



# Planes of Division...

- Tissue/Organ Sections
- Cross section – MRI or CT scans
- Longitudinal Sections – top to bottom
- Oblique sections – cut at a 45' angle
  
- [The Visible Human Project](#)

# Lets Practice

- The wrist is \_\_\_\_\_ to the elbow
- The knee is \_\_\_\_\_ to the phalanges.
- The heart is \_\_\_\_\_ to the vertebrae.
- The pelvis is \_\_\_\_\_ to the heart.
- The eyes are \_\_\_\_\_ to the ears.