

The module: Musculo-Skeletal System

Session: 1

Anatomico-medical terminology

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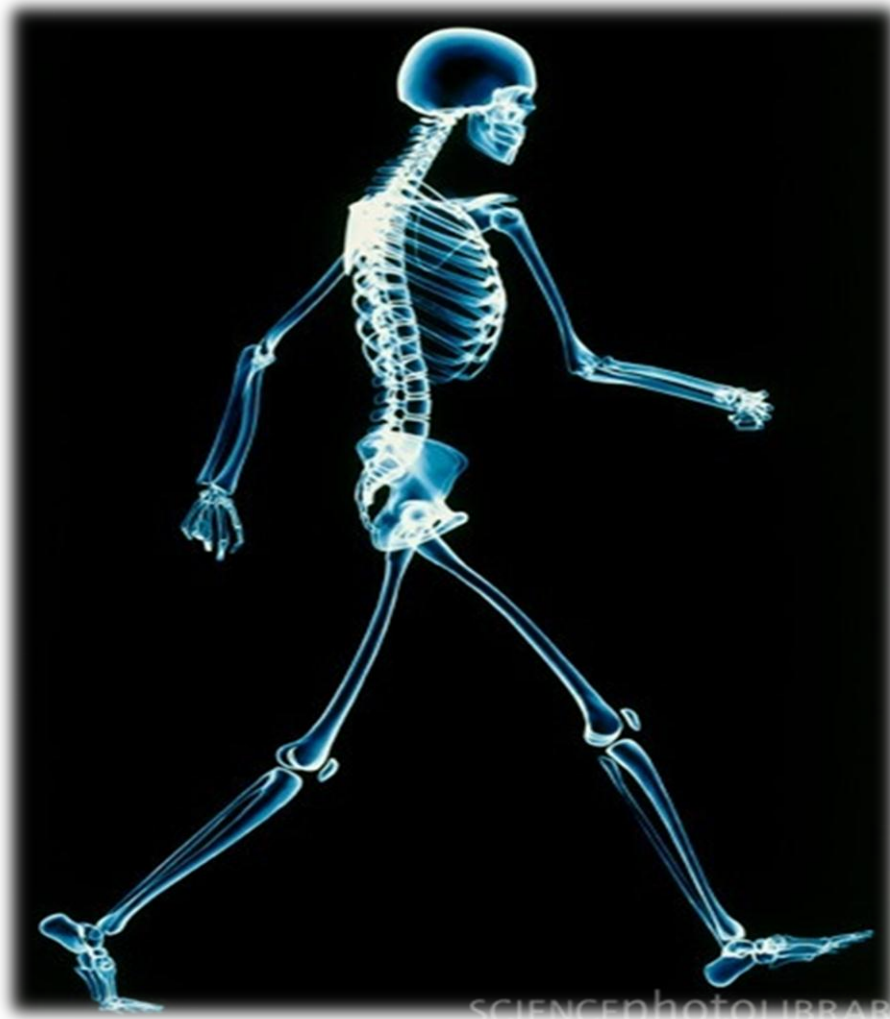
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Musculoskeletal System



Medical terminology: Learning Objectives

1. Describe the anatomical positions
2. Describe the sagittal, coronal and transverse planes
3. Display a working knowledge of terms of movements



LO1

Anatomical position:

Def:

Standing erect, with palms
and feet facing forward
- Is the standard reference
point in which all positions,
movements, and planes are
described

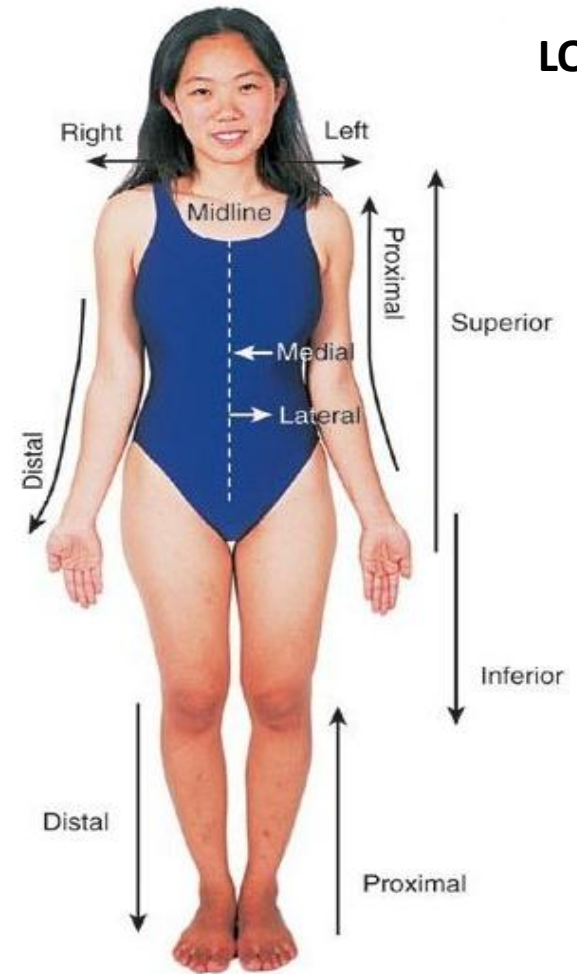


Terms of position and direction
Describe the position of one body
part relative to another, usually
along one of the three major body
planes

Body planes:

- 1.Sagittal plane
2. Frontal plane
- 3.Transverse plane

LO1

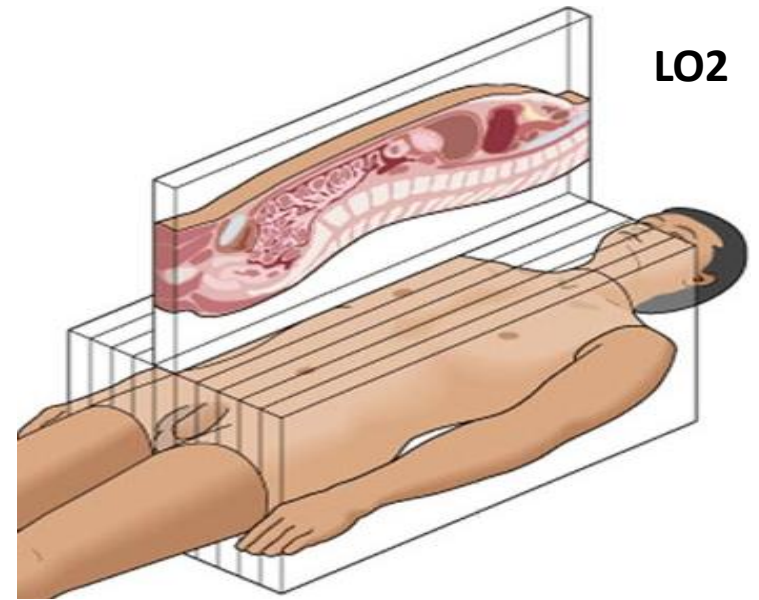
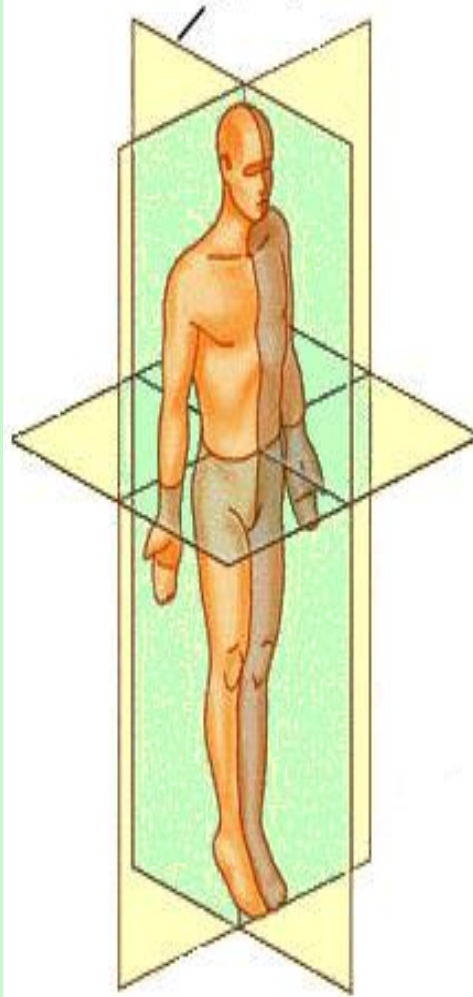


Sagittal plane

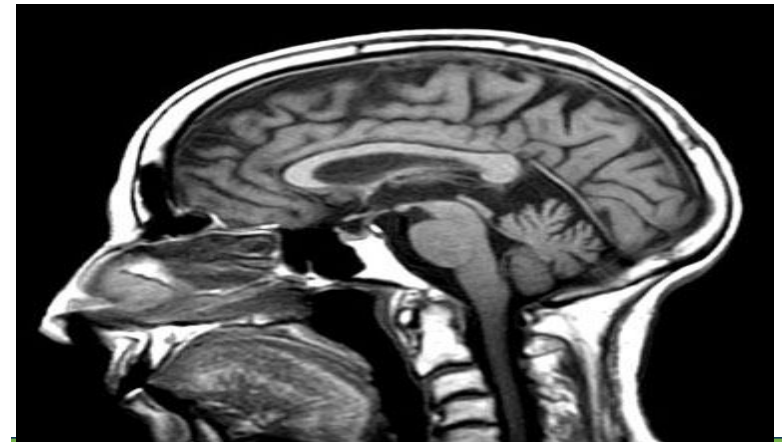
The plane dividing the body into right and left portions

Midsagittal or median are names for the plane dividing the body into equal right and left halves

Median / saggital plane



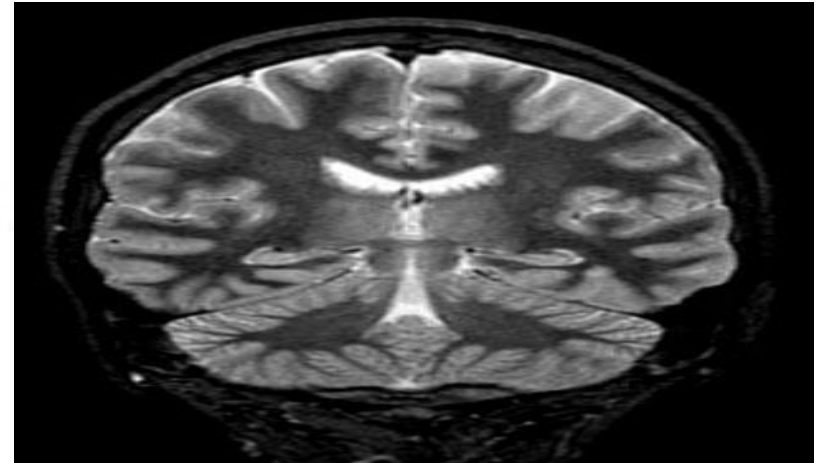
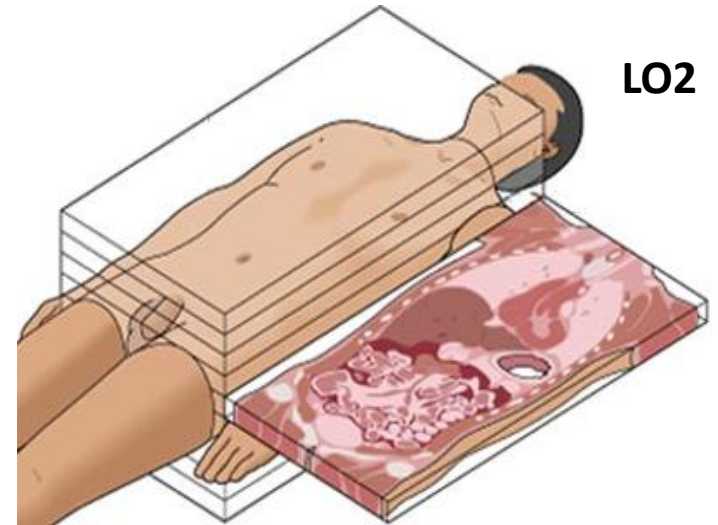
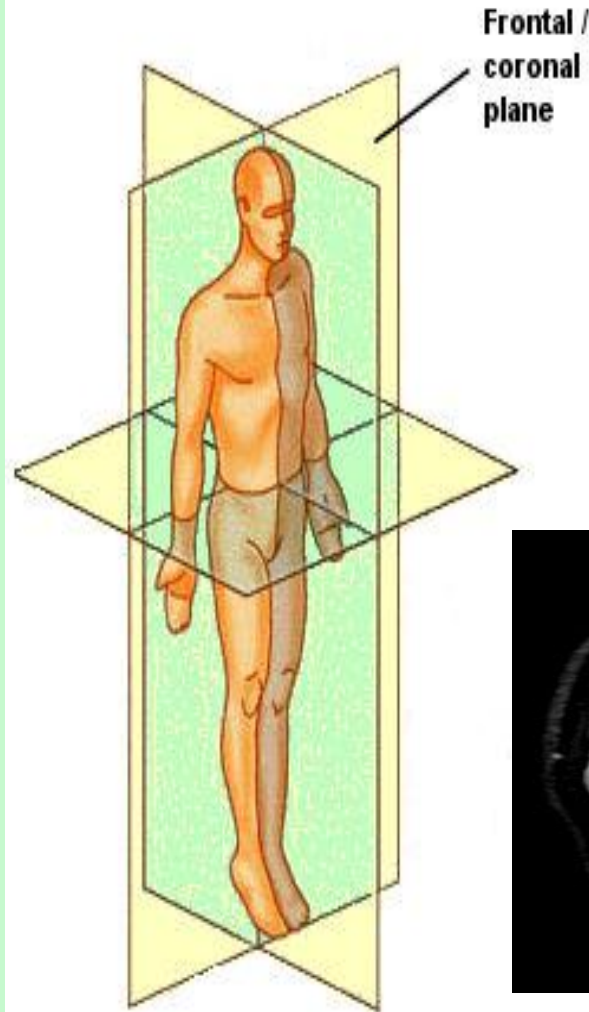
LO2



Frontal plane

The plane
dividing the
body into
front and
back
portions

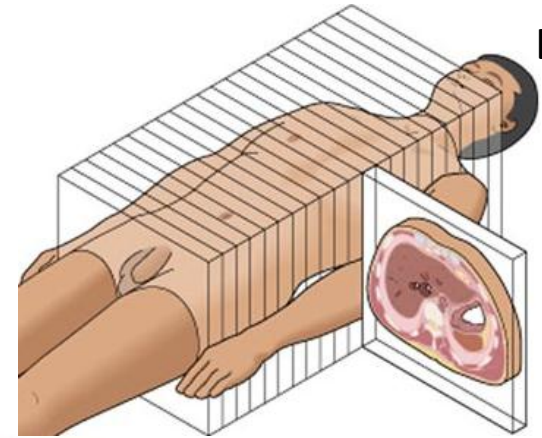
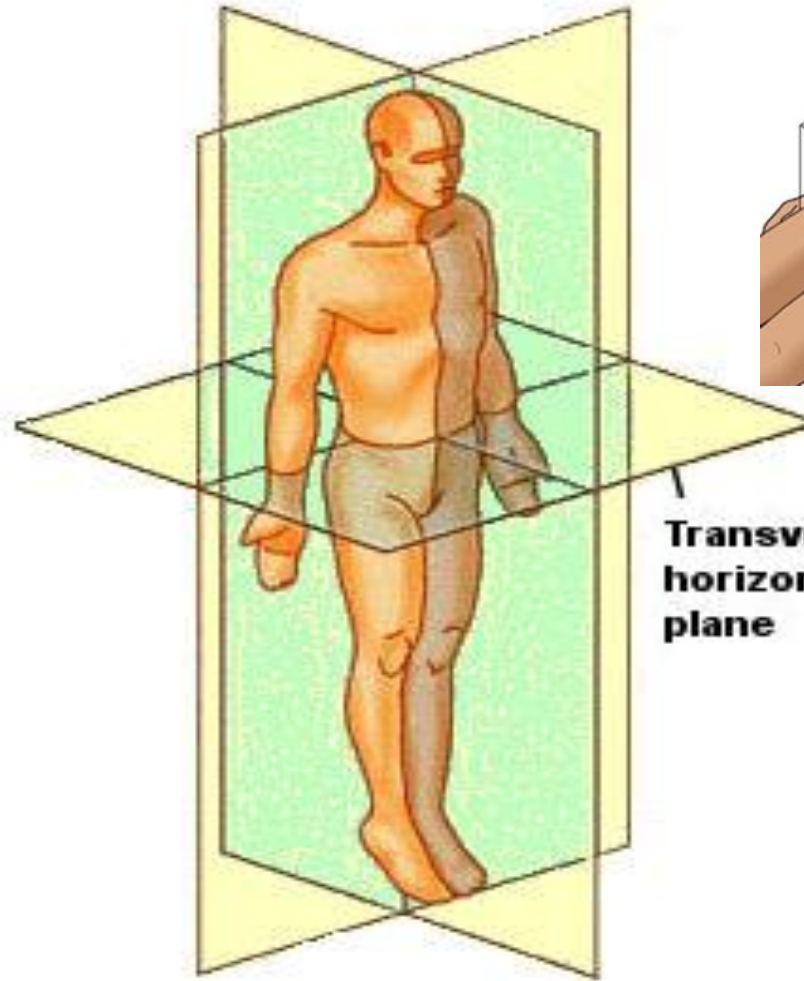
Also called the
Coronal
plane



Transverse plane

The horizontal plane dividing the body into upper and lower portions

Also called the Horizontal plane



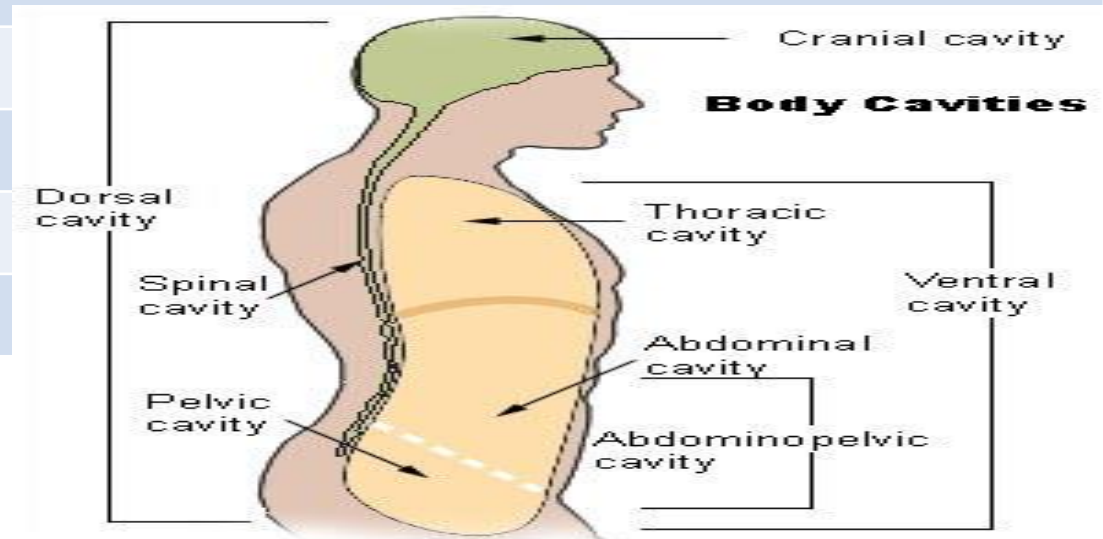
LO2



Superior	Refers to a structure being closer to the head or higher than another structure in the body
Inferior	Refers to a structure being closer to the feet or lower than another structure in the body
Anterior	Refers to a structure being more in front than another structure in the body
Posterior	Refers to a structure being more in back than another structure in the body
medial	Refers to a structure being closer to the midline or median plane of the body than another structure of the body
lateral	Refers to a structure being farther away from the midline than another structure of the body
Distal extremity	Refers to a structure being further away from the <u>root</u> of the limb than another structure in the limb
proximal	Refers to a structure being closer to the <u>root</u> of the limb than another structure in that limb

LO1

superficial	Refers to a structure being closer to the surface of the body than another structure
deep	Refers to a structure being closer to the core of the body than another structure
ventral	Towards the front or belly
dorsal	Towards the back



Positions and Directions

Prone

- Lying face down



Supine

- Lying face up

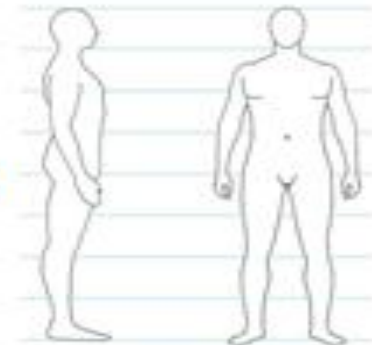


Unilateral

- Pertaining to one side of the body

Bilateral

- Pertaining to both sides of the body



ANATOMICAL TERMINOLOGY

- **Hand:**

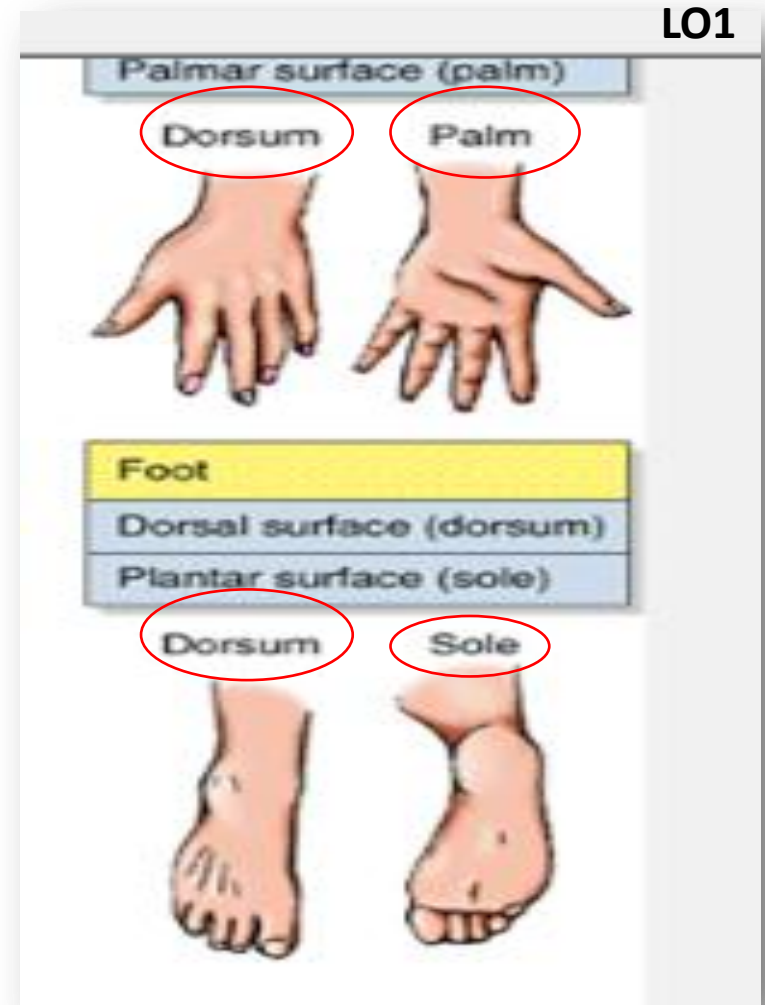
- ❖ **Palmar**

- ❖ **Dorsal**

- **Foot:**

- ❖ **Dorsal**

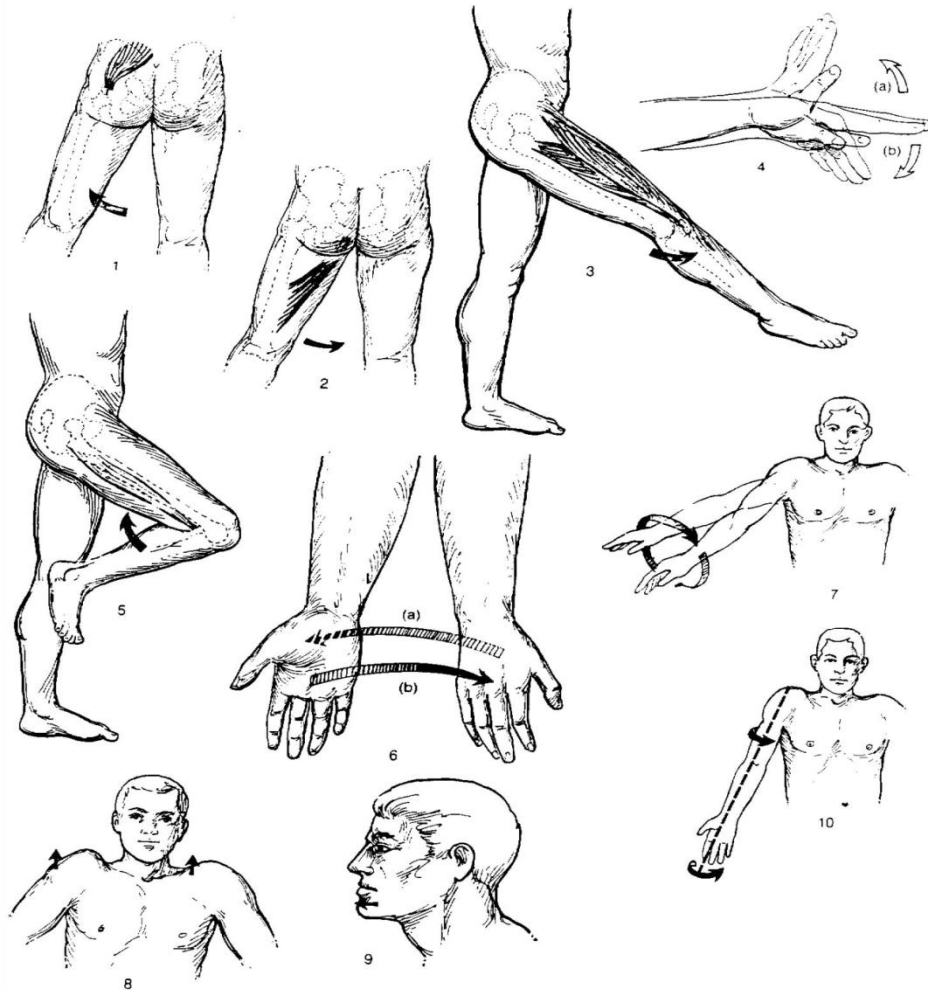
- ❖ **Plantar (Solar)**



Movements

L03

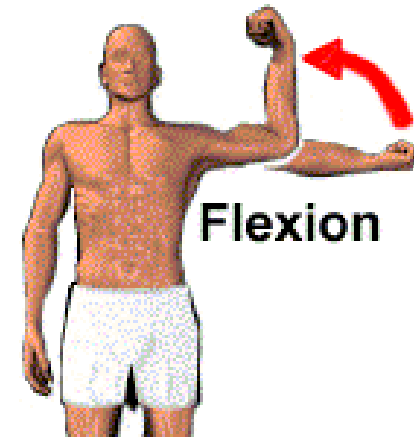
- Flexion
- Extension
- Hyperextension
- Adduction
- Abduction
- Pronation
- Supination
- Retraction
- Protraction
- Elevation
- Depression
- Rotation
- Circumduction
- External Rotation
- Internal Rotation
- Inversion
- Eversion
- Dorsiflexion
- Plantarflexion
- Radial Deviation
- Ulnar Deviation
- Opposition



Movements

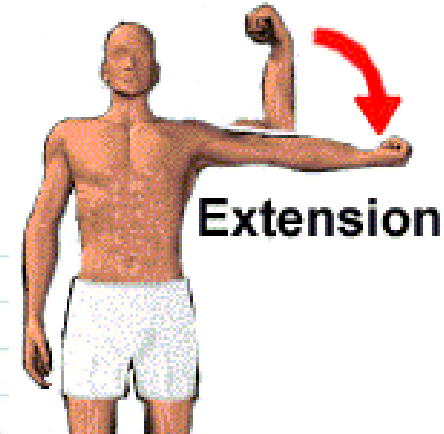
Flexion

- Bending a joint or decreasing the angle between two bones



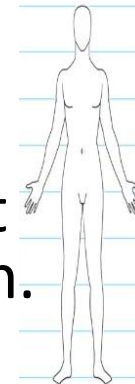
Extension

- Straightening a joint or increasing the angle between two bones



Hyperextension

- Excessive extension of the parts at a joint beyond anatomical position.

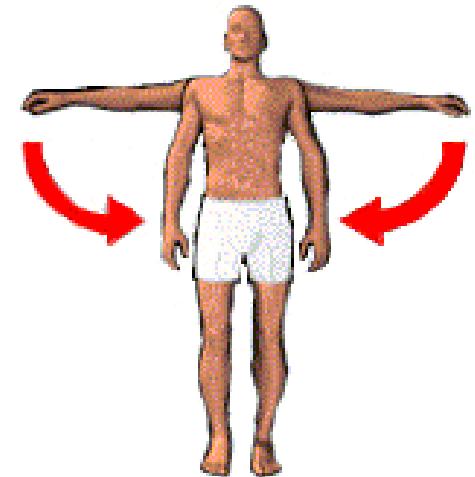


LO1

Movements

Adduction

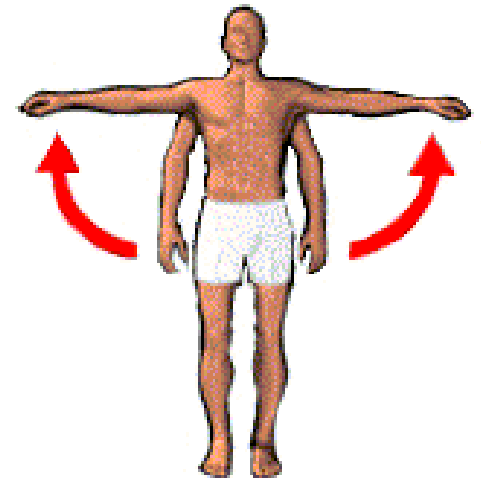
- Moving a body part towards the midline of the body



Adduction

Abduction

- Moving a body part away from the midline of the body



Abduction

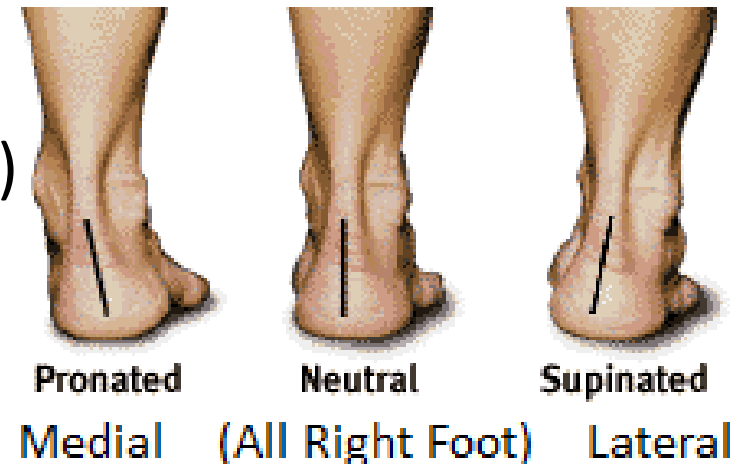
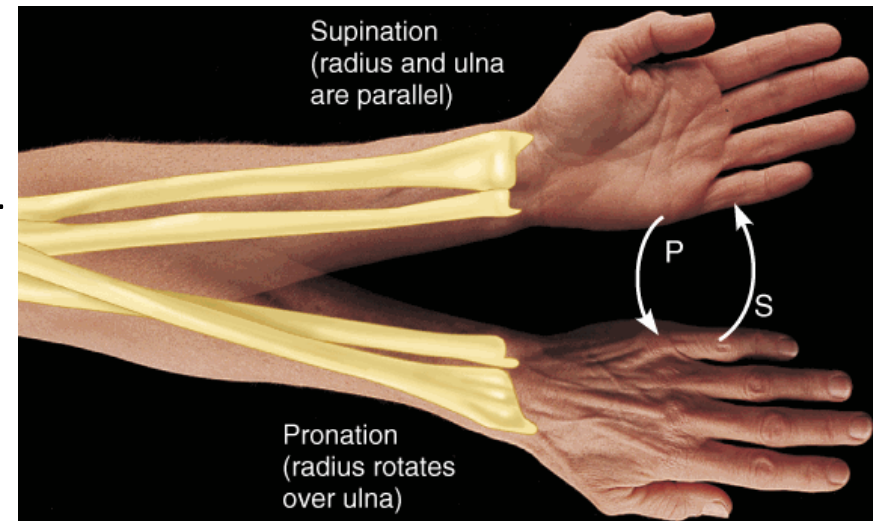
Movements

Pronation

- Turning the arm or foot downward
- (palm or sole of the foot - down)
 - Prone

Supination

- Turning the arm or foot upward
- (palm or sole of the foot - up)
 - Supine



Movements

Retraction

- Moving a part backward

Protraction

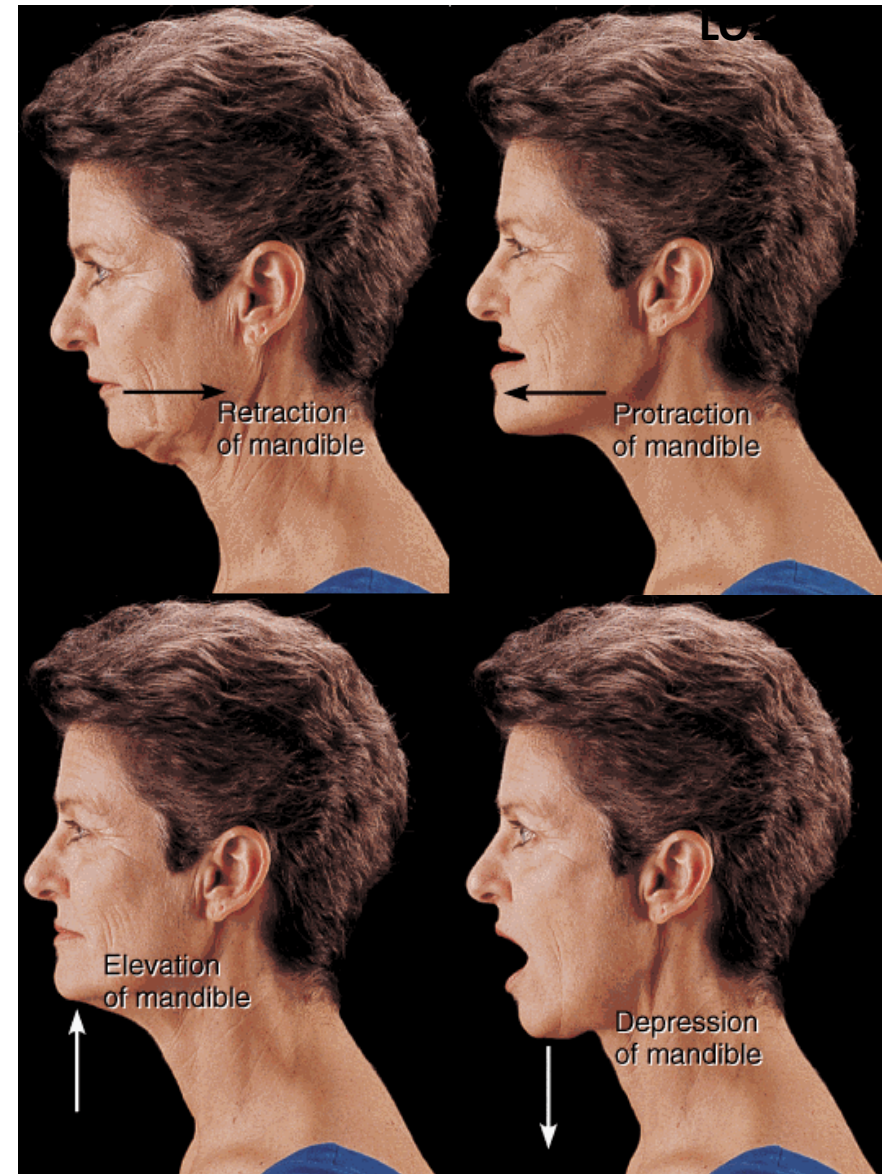
- Moving a part forward

Elevation

- Raising a part

Depression

- Lowering a part



Movements

Rotation

- Turning on a single axis

Circumduction

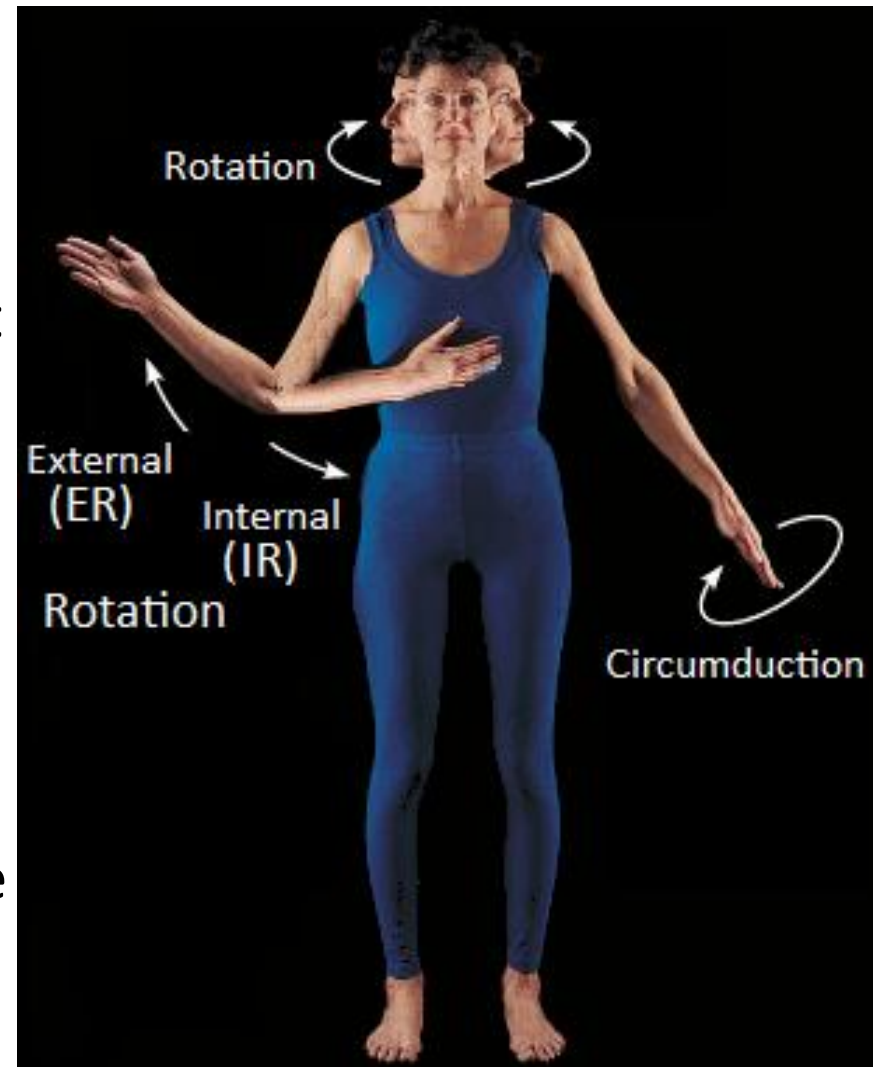
- Tri-planar, circular motion at the hip or shoulder

External rotation

- Rotation of the hip or shoulder away from the midline

Internal rotation

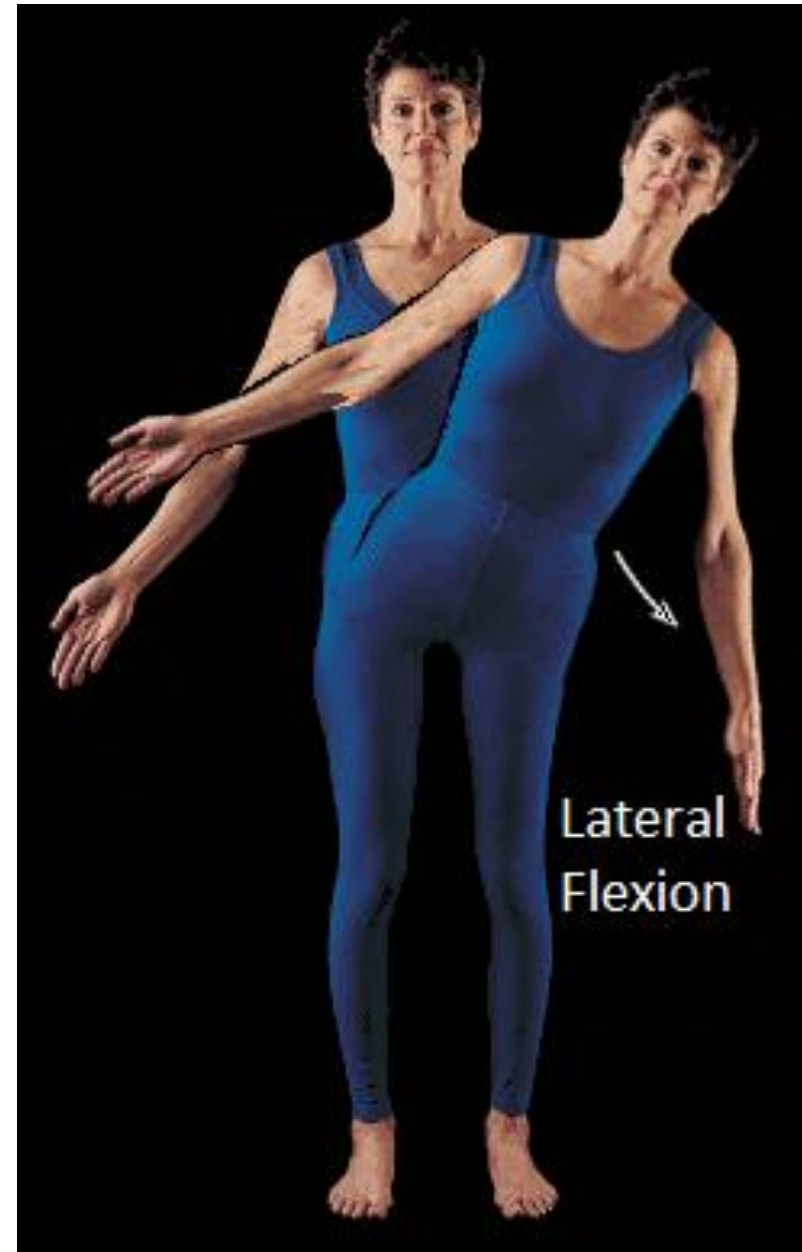
- Rotation of the hip or shoulder toward the midline



Movements

Lateral Flexion

- Side-bending left or right



Movements of the Foot

Inversion

- Turning the sole of the foot inward

Eversion

- Turning the sole of the foot outward

Dorsiflexion

- Ankle movement bringing the foot towards the shin

Plantarflexion

- Ankle movement pointing the foot downward



Movements of the Wrist & Thumb

Radial Deviation

- Movement of the wrist towards the radius or lateral side.

Ulnar Deviation

- Movement of the wrist towards the ulna or medial side.

Opposition

- Movement of the thumb across the palm of the hand.

