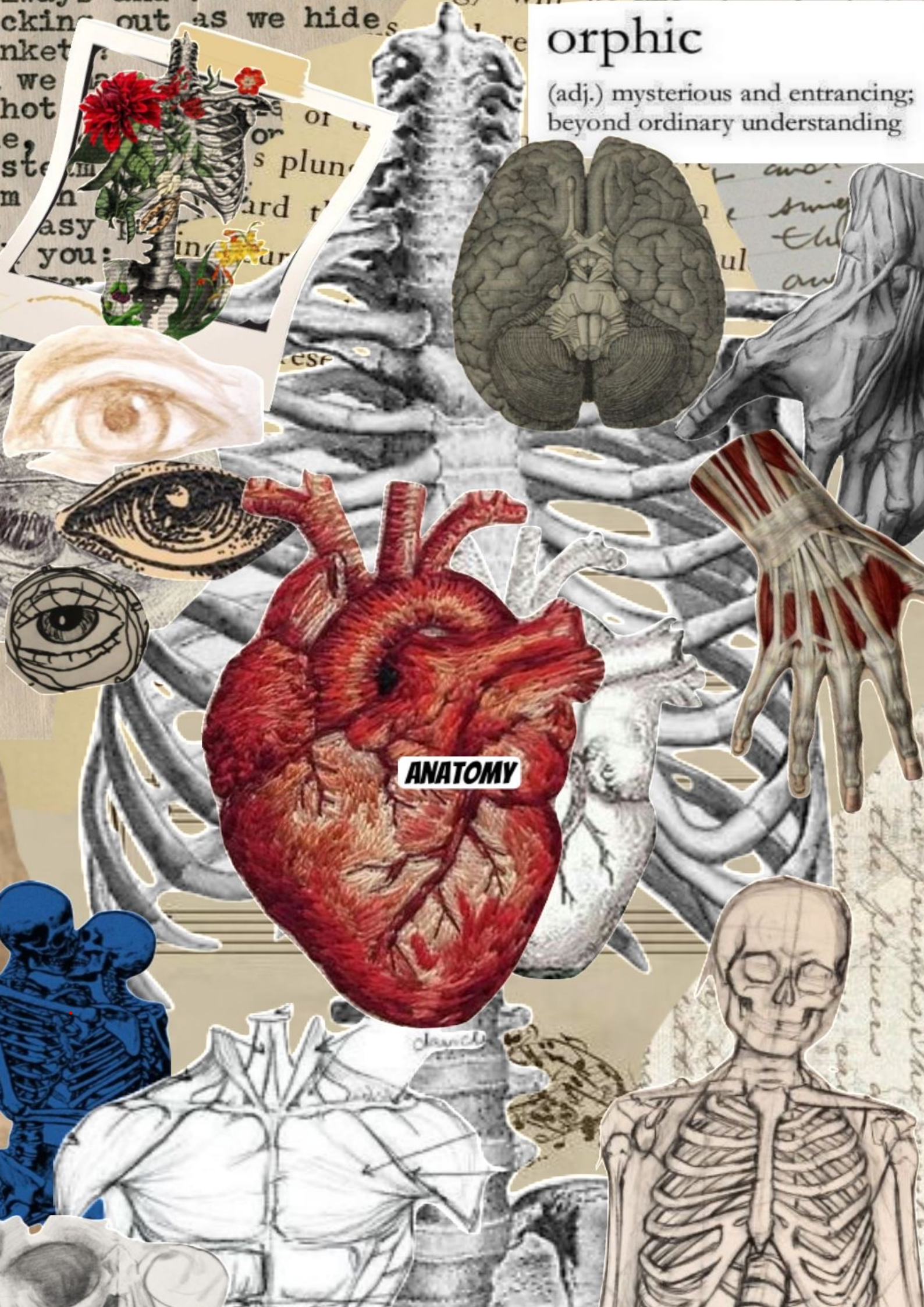
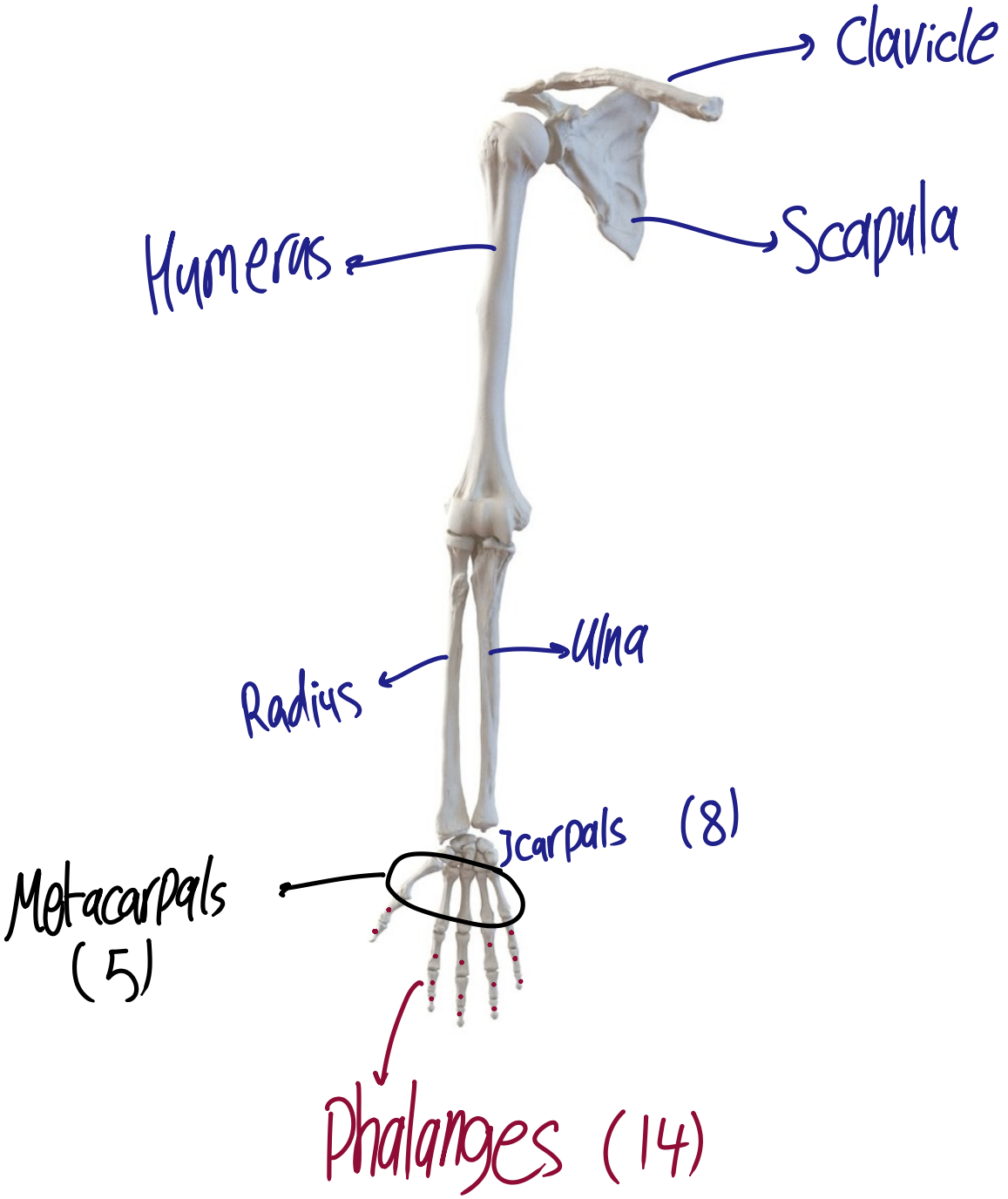

orphic
(adj.) mysterious and entrancing;
beyond ordinary understanding
ANATOMY

﴿ أَلَا بِذِكْرِ اللَّهِ تَطْمَئِنُّ الْقُلُوبُ ﴾

Bones of the upper limb

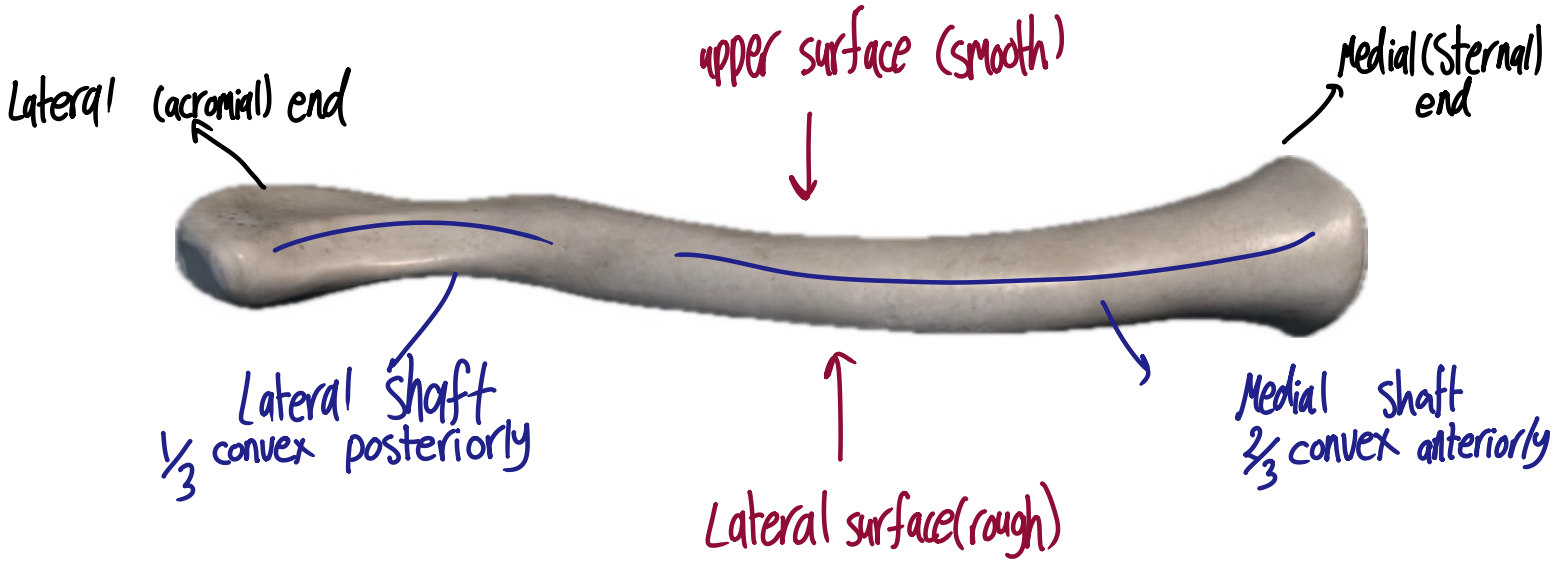


Clavicle

https://youtu.be/Htf84xibeFw?feature=shared

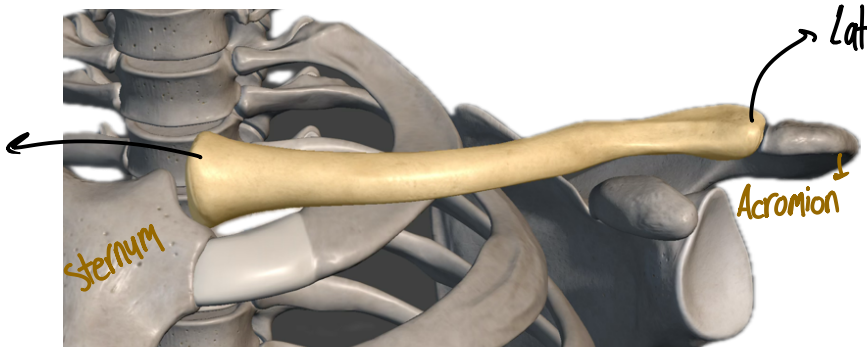
→ It is the only long bone placed horizontally

→ It has no medullary cavity



two ends

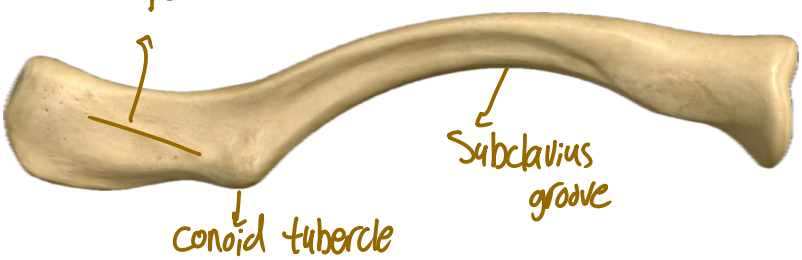
+Flat+



two surfaces

Lower surface is rough

upper surface is smooth



two shafts

Anterior view

Medial shaft

2/3 convex anteriorly

posterior view

Lateral shaft

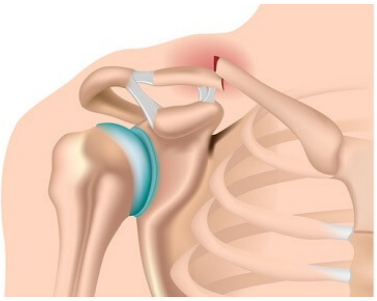
1/3 convex posteriorly

* Function of clavicle:

- It transmits weight and forces from the U.L. to the axial skeleton.
- It protects the vessels and nerves running behind it.

- It is the commonest bone to be fractured in the U.L.

- The middle 1/3 is the commonest site to be fractured

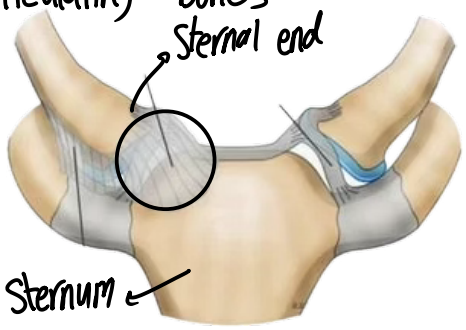


Articulation of Clavicle

Sternoclavicular Joint

- Synovial plane

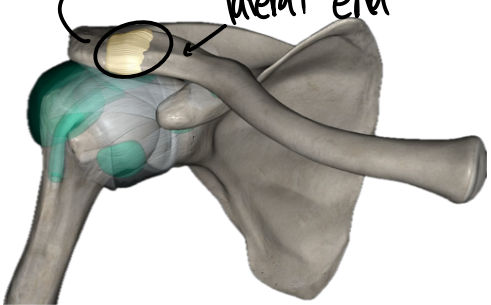
Articulating bones:



Acromioclavicular Joint

- Synovial plane

Articulating bones:

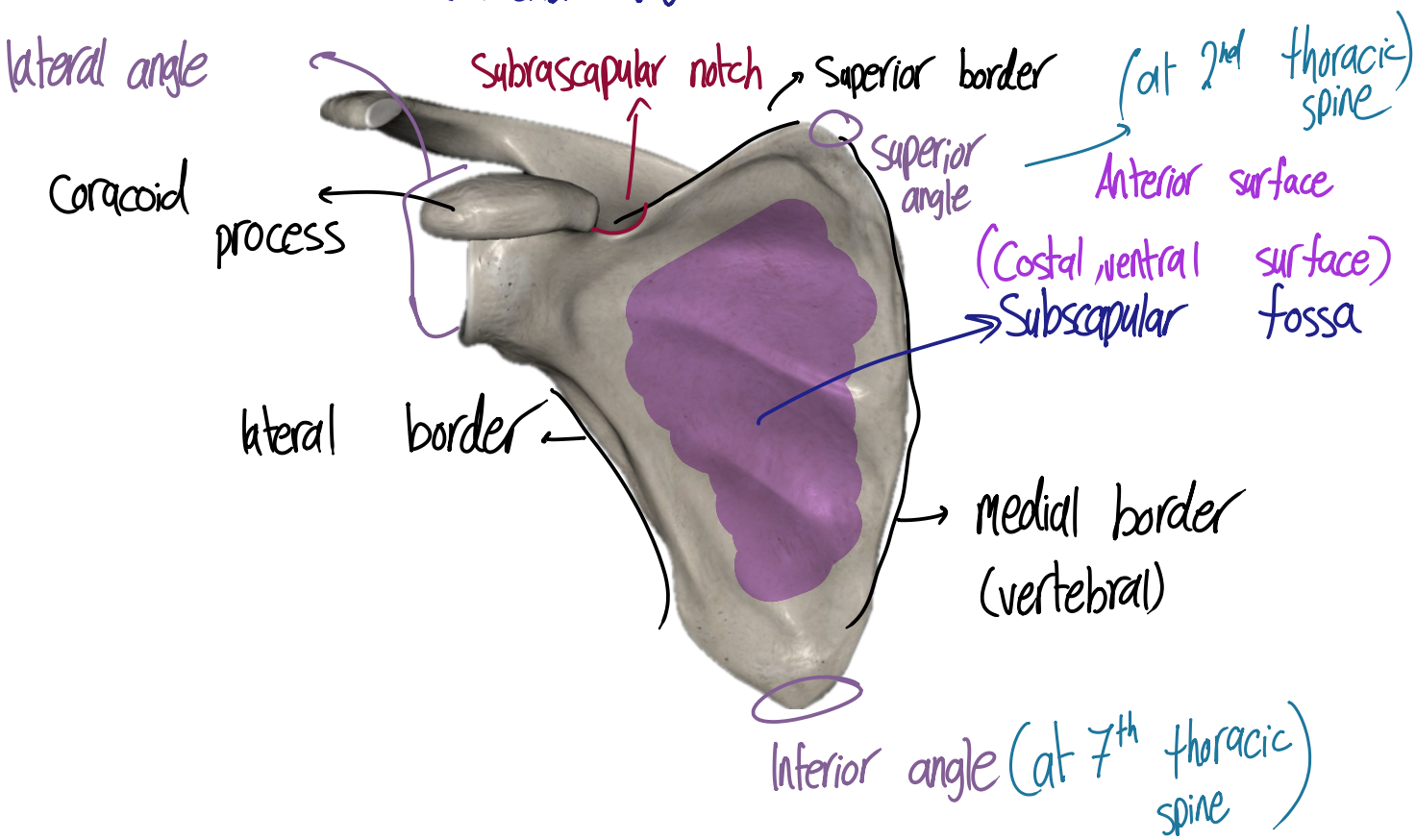


Scapula

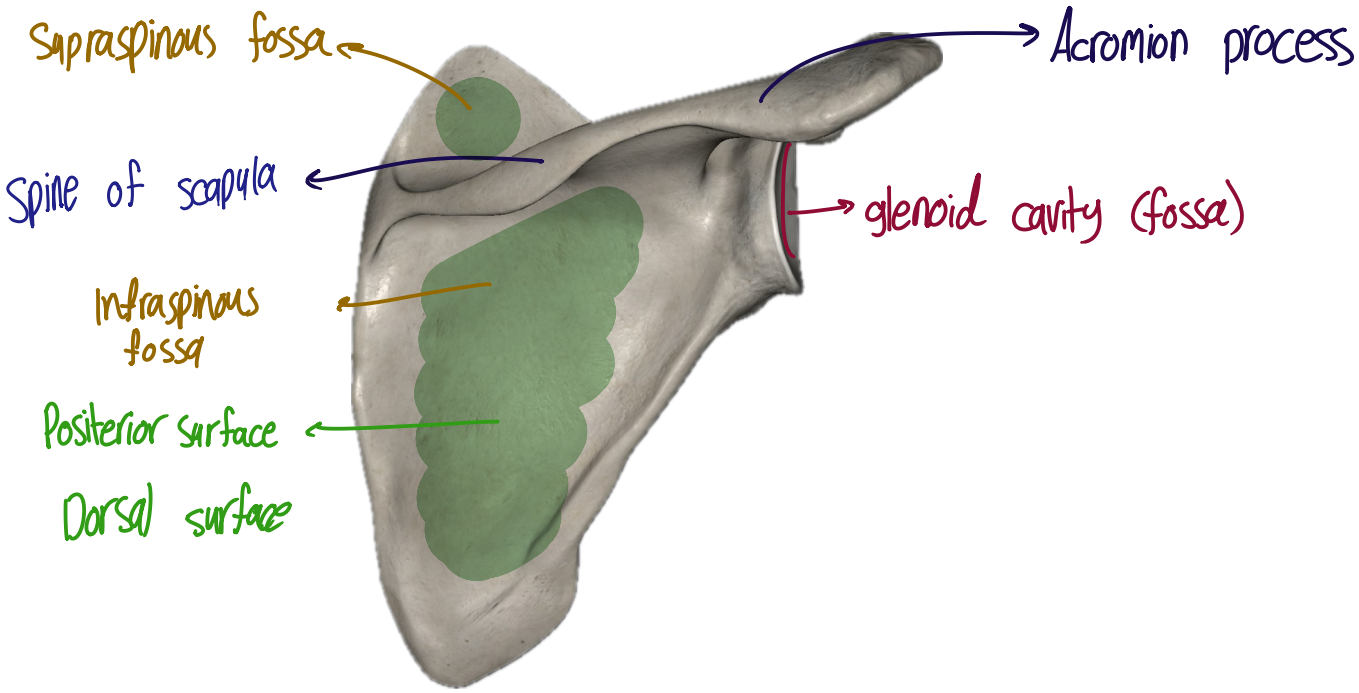
https://youtu.be/70j06vbmclM?feature=shared

→ It is a flat bone, lies on an oblique plane on the postero-lateral aspect of the upper part of chest wall.

(Anterior View)

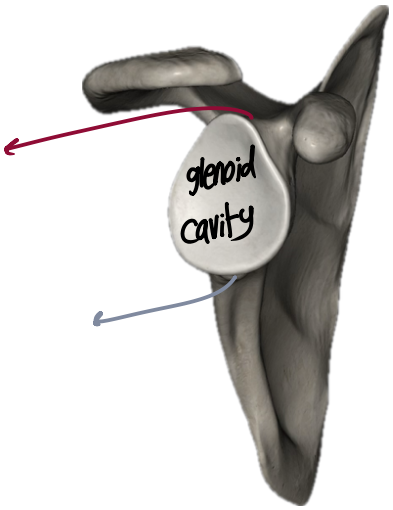


(posterior View)

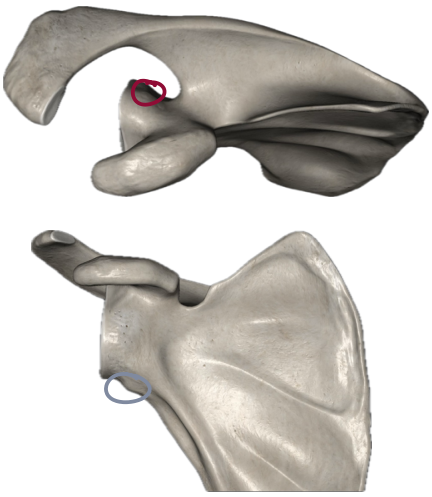


(Lateral view)

Supraglenoid tubercle



Infraglenoid tubercle

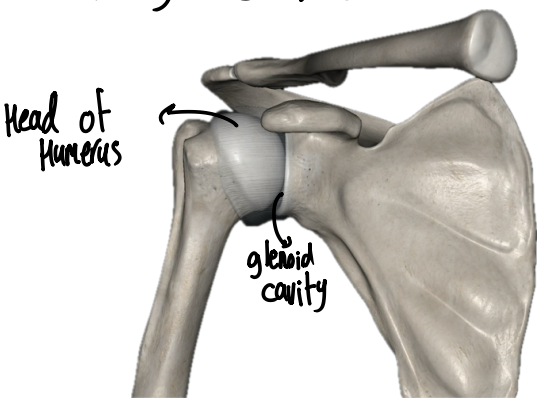


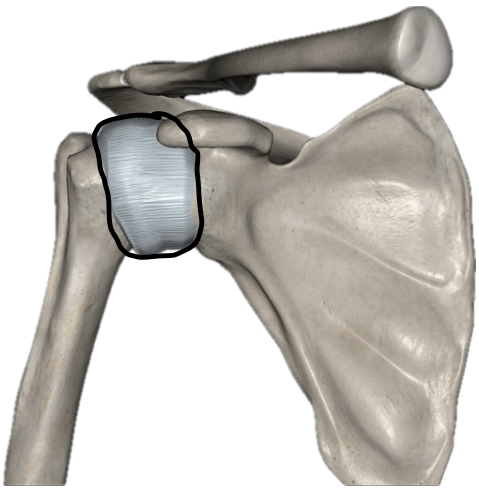
Articulation of scapula

Shoulder joint

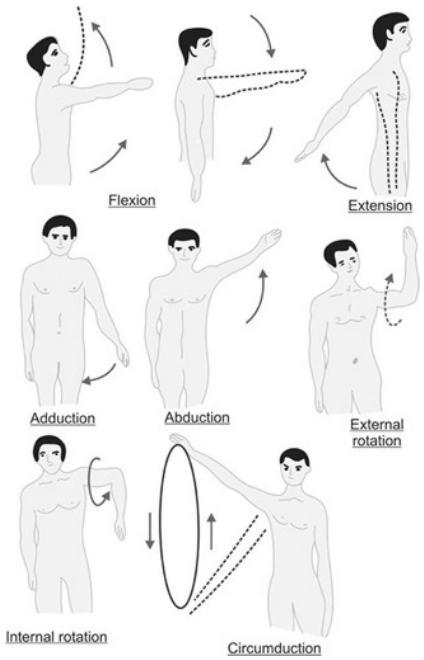
- Ball and socket synovial plane

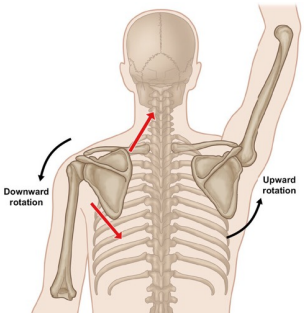
- Articulating bones:





Movements of shoulder or arm





https://youtu.be/H4nfQEeJmFo?feature=shared

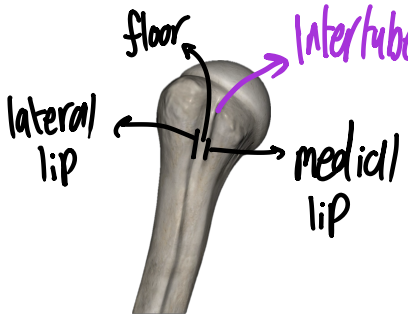
Humerus

https://youtu.be/A7UMQh4LSGU?feature=shared

→ It is a long bone.

→ It is the bone of the arm.

(Anterior view)



Greater tubercle (lateral)

lesser tubercle (medial)

Intertubercular (bicipital) groove

Head

anatomical neck

surgical neck

deltoid tuberosity

lateral supracondylar ridge

radial fossa

lateral epicondyle

Capitulum

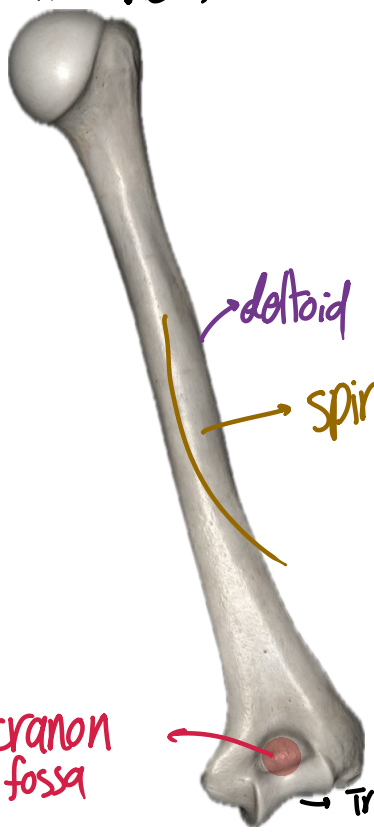
Medial supracondylar ridge

coronoid fossa

medial epicondyle

Trochlea

(Posterior view)



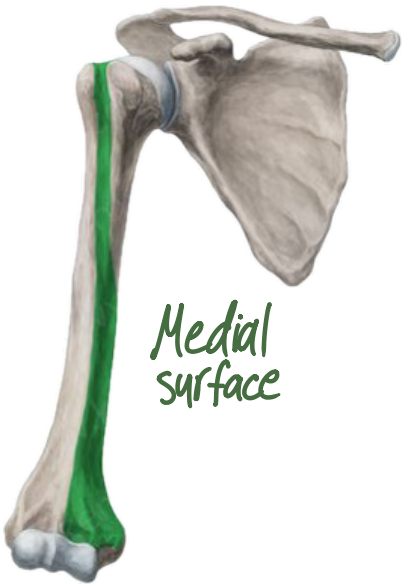
deltoid tuberosity

spiral/radial groove

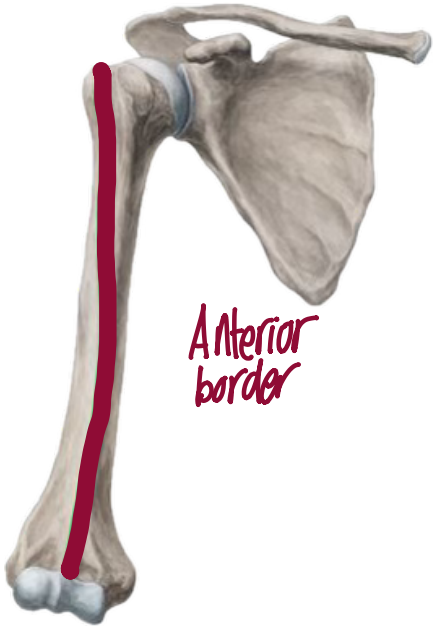
olecranon fossa

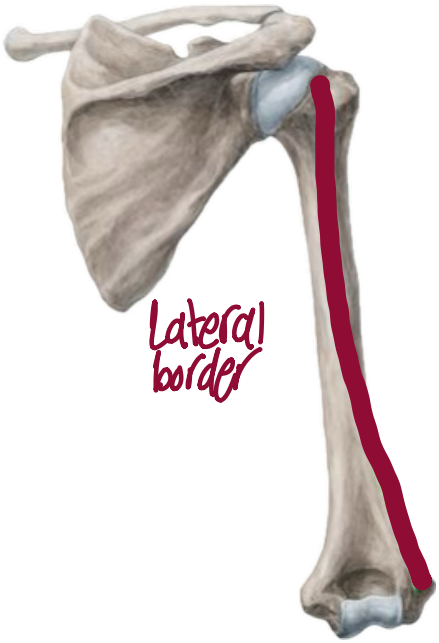
Trochlea

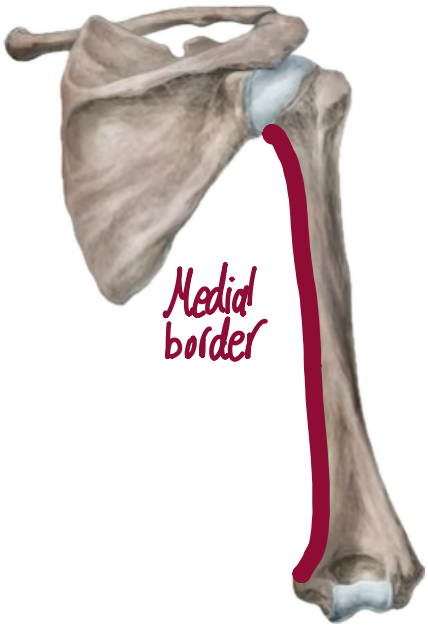
Surfaces



Borders

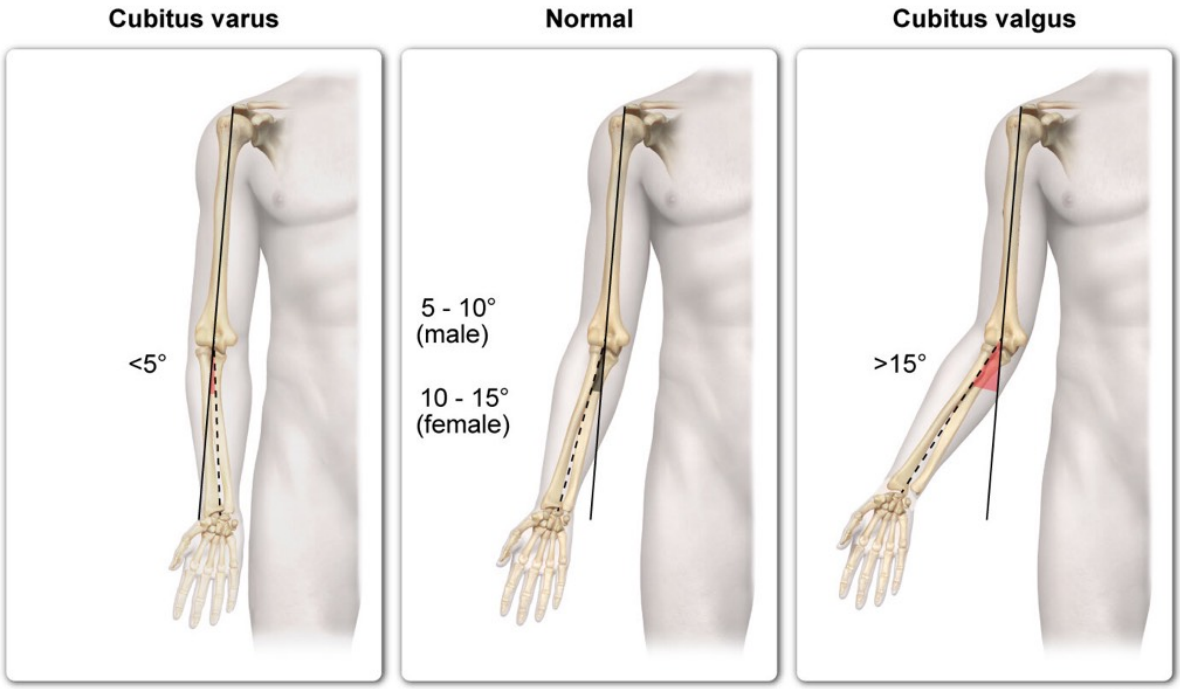






Carrying angle

- It is the angle between the long axis of humerus and the long axis of extended supinated forearm.
- This angle allow free movement of upper limb away from the pelvis.
- It is helping in carrying objects.
- Normal range is 5-15 degree.

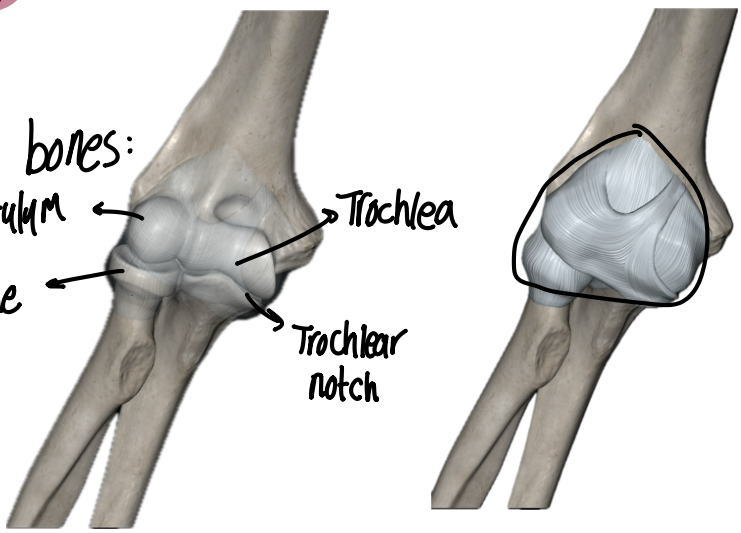


Articulation of humerus

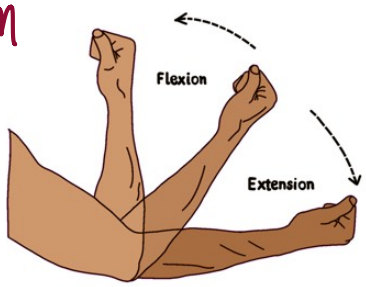
Elbow Joint

- Hinge synovial plane

Articulating bones:



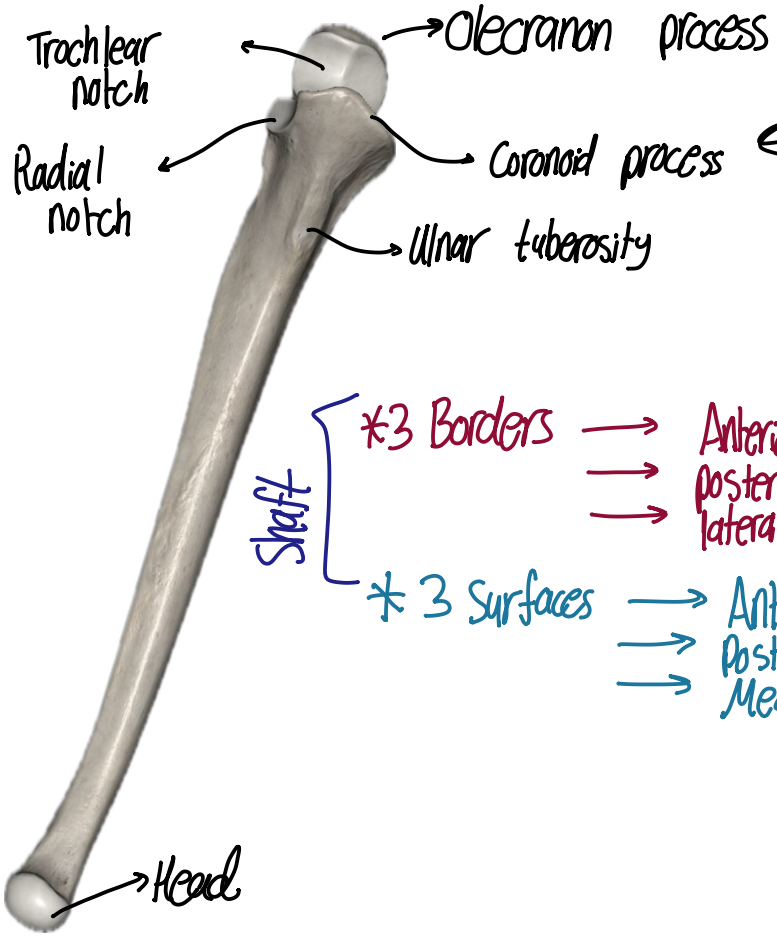
Movement of the elbow or forearm



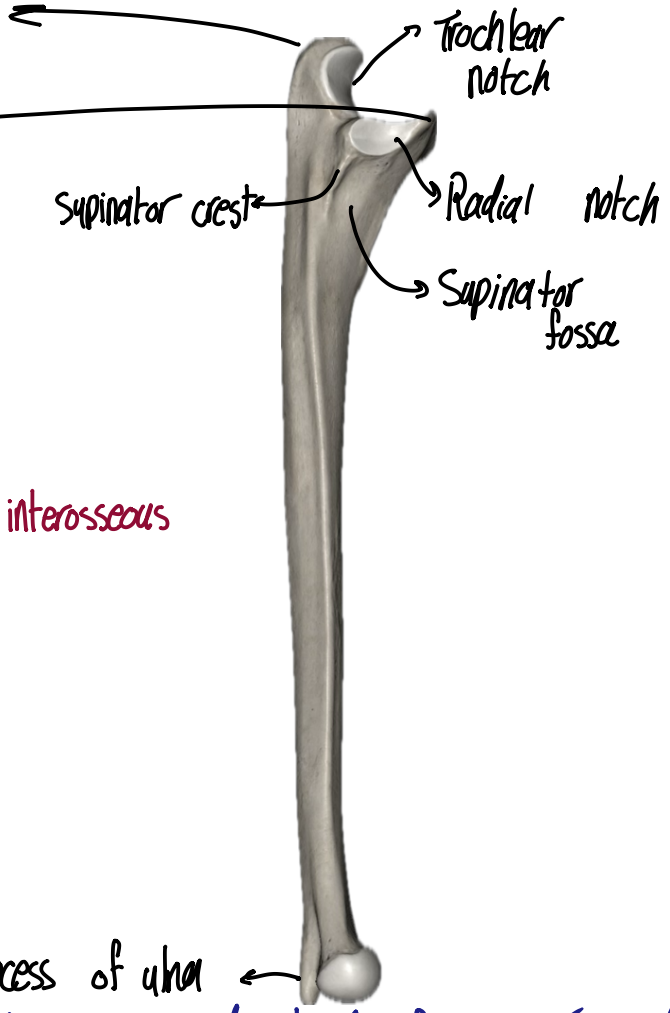
Ulna

→ It is a long bone forming the medial bone of forearm.

(Anterior view)

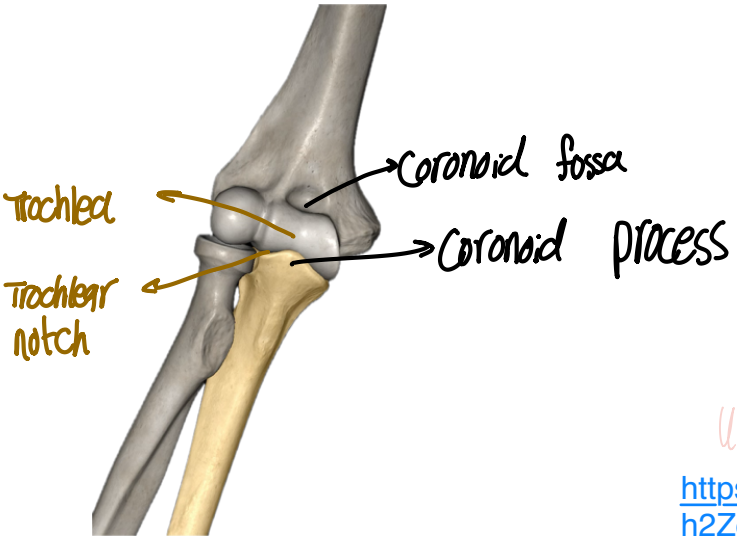


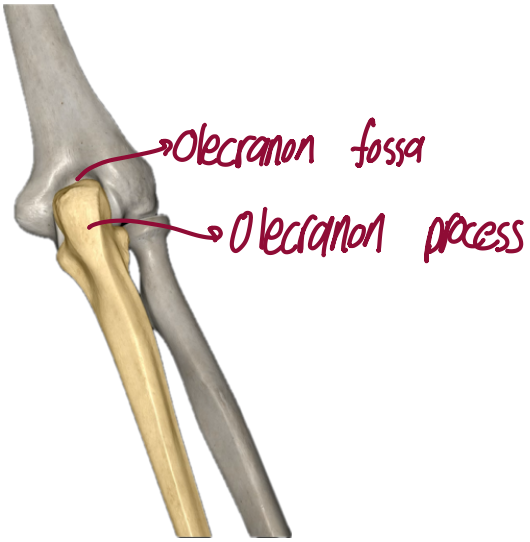
(Lateral view)



Shaft
- *3 Borders → Anterior, Posterior, lateral or interosseous
- * 3 Surfaces → Anterior, Posterior, Medial

*The only bone where the head is found at the lower end instead of upper end.





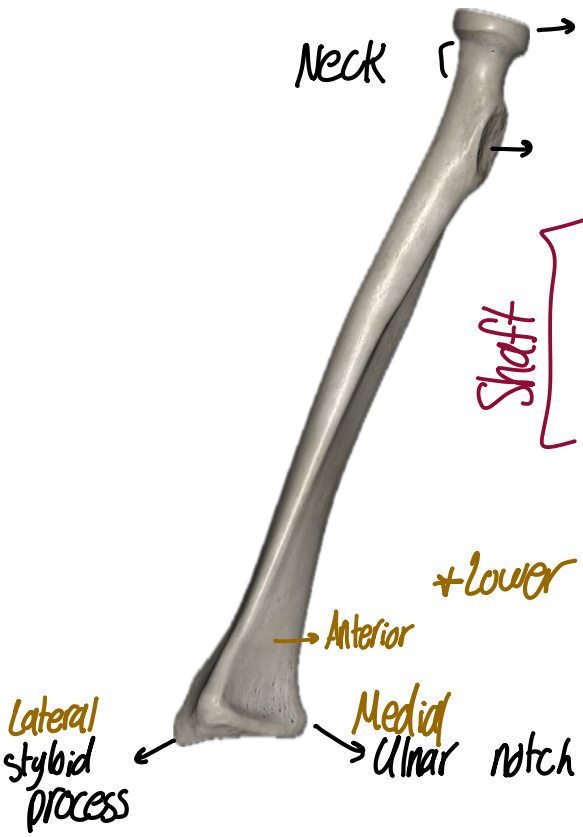
Ulna & Radius

https://youtu.be/h2ZdM1RmhLQ?feature=shared

Radius

→ It is a long bone forming the lateral bone of forearm.

(Anterior view)



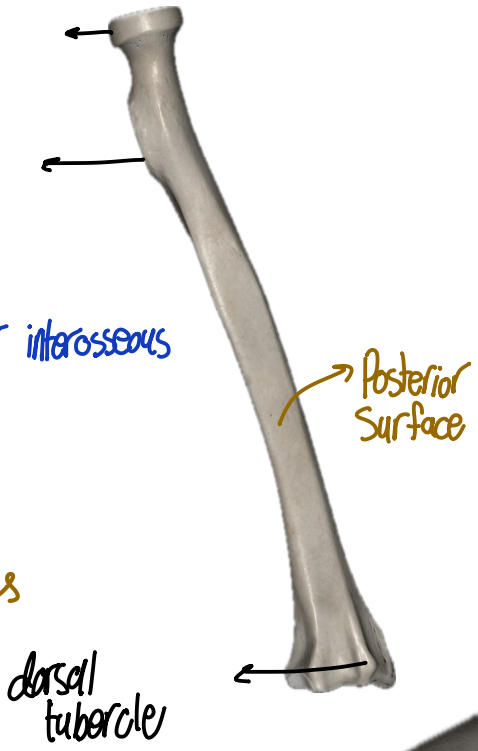
Head

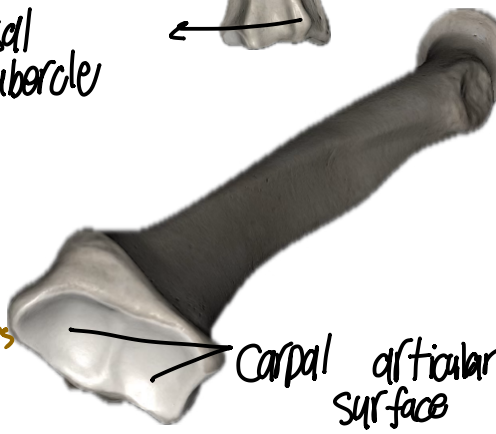
Radial tuberosity

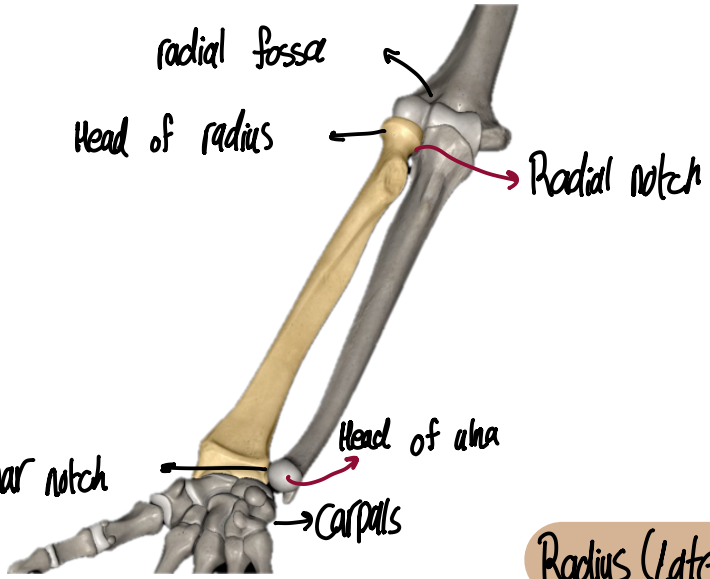
Shaft
- 3 Borders → Anterior, posterior, Medial or interosseous
- 3 Surfaces → Anterior, posterior, Lateral

+lower end has 5 surfaces

(posterior view)







Notes :

- Ulna has Radial notch
- Radius has Ulnar notch

Radius (Lateral) ⟷ Styloid process of radius lateral

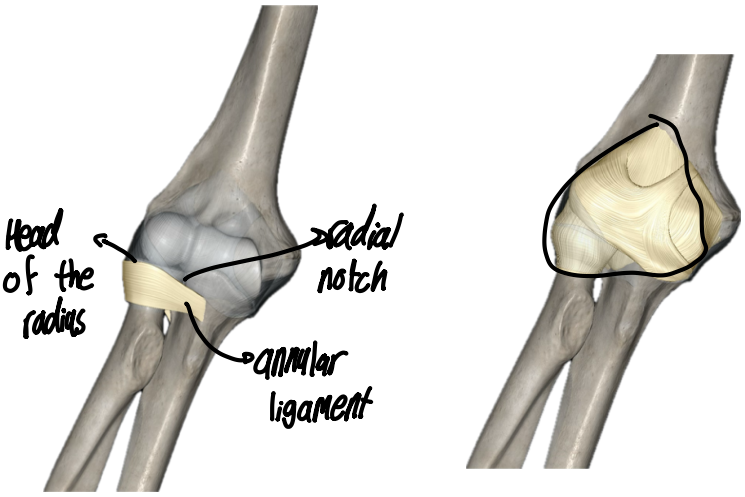
Ulna (Medial) ⟷ Styloid process of ulna medial

*Styloid process of ulna is shorter than styloid process of radius

Joints of radius and ulna

-Proximal radioulnar joint

Articulating bones:



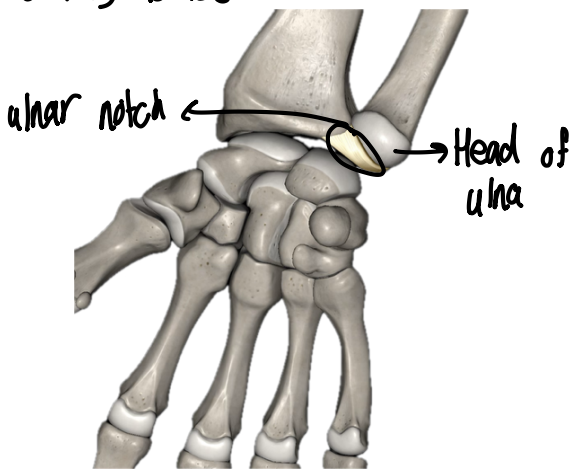
Pivot synovial

Movement: pronation & supination

https://youtube.com/shorts/4mJDWnczzFU?feature=shared

- Distal radioulnar joint

Articulating bones:



-Wrist joint

Synovial condyloid

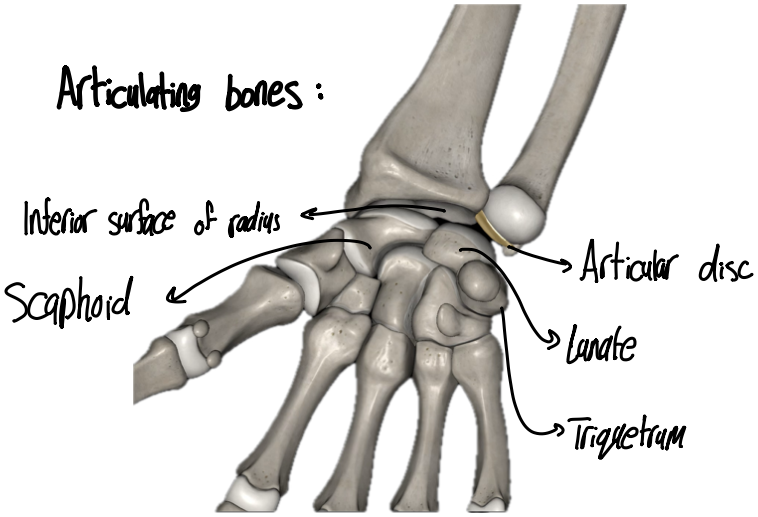
Movement:

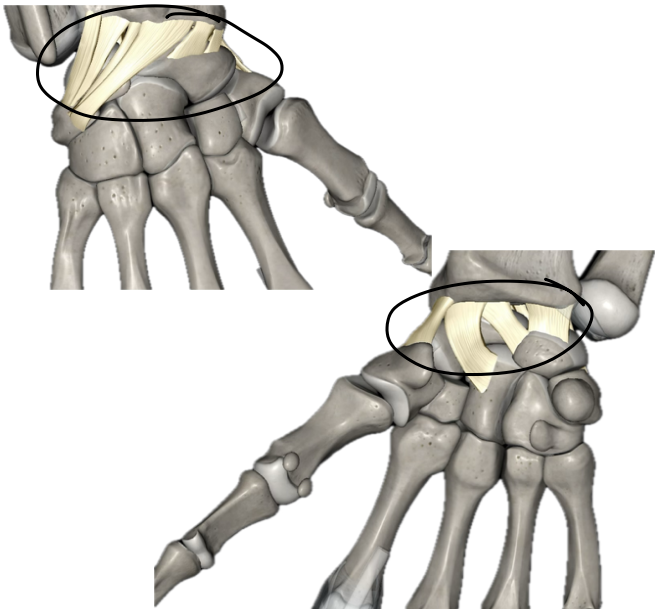
https://youtu.be/ieRJSvrkQsE?feature=shared

Flexion & Extension

Abduction & Adduction

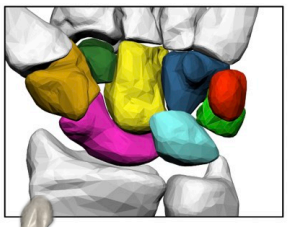
Articulating bones:





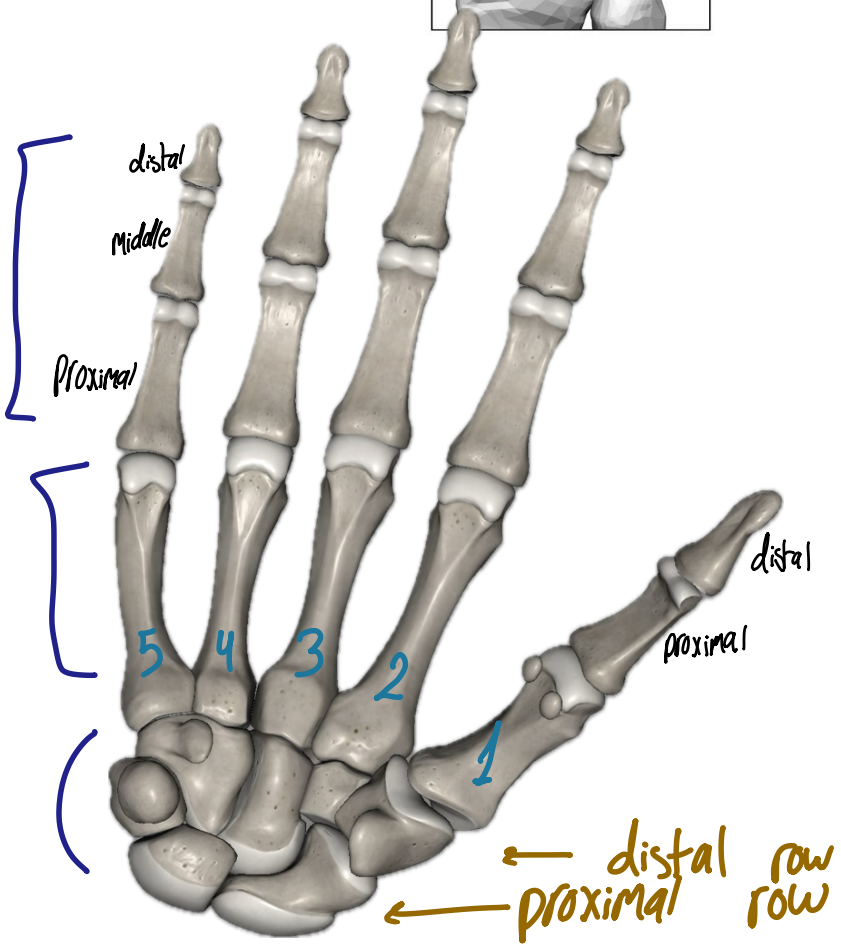
Bones of the hand

- Scaphoid
- Lunate
- Triquetrum
- Pisiform
- Trapezium
- Trapezoid
- Capitate
- Hamate



https://youtu.be/wW4eeeeRDug?feature=shared

(14) Phalanges

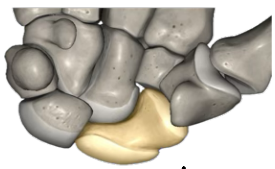


(5) Metacarpals

8 carpals

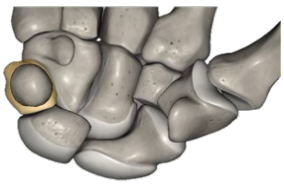
*carpals

→ Stop Letting Those People Touch The Cadaver's Hand

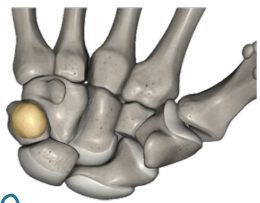


Scaphoid

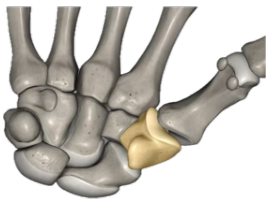
Lunate



Triquetrum

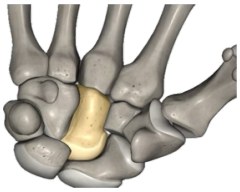


Pisiform

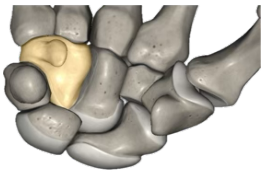


Trapezium

Trapezoid



Capitate



Hamate

Joints of hands

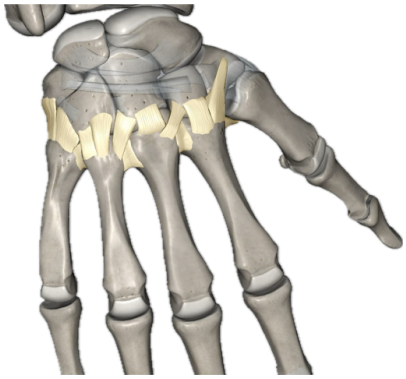
-Intercarpal joint

Plane synovial

Articulating bones:
Between carpal bones

Movement:
Gliding movement

-carpometacarpal joint (Medial four fingers)



Articulating bones:
carpal and medial four metacarbal bones

-carpometacarpal joint (Thumb)

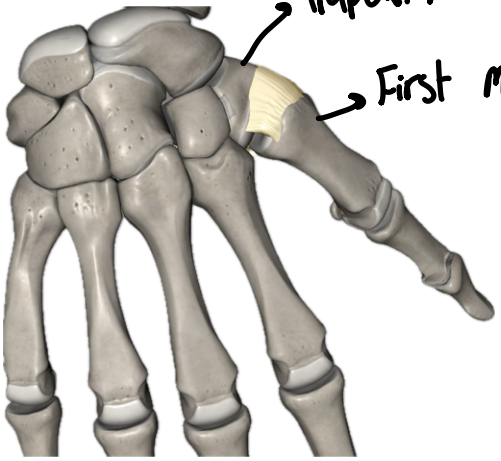
Saddle shaped synovial (Biaxial)

Movement:
Flexion & Extension
Adduction & Abduction

Opposition

https://youtu.be/tt79siwHOzI?feature=shared

Articulating bones:

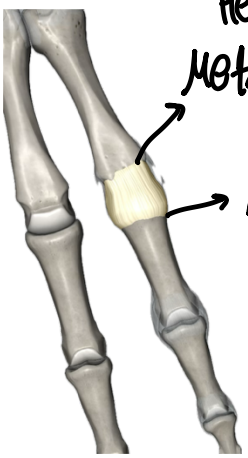


- Metacarpophalangeal joint

- Synovial condyloid

Movement :
Flexion & Extension
Adduction & Abduction

Articulating bones:
Head of metacarpal bones
→ base of proximal phalanges



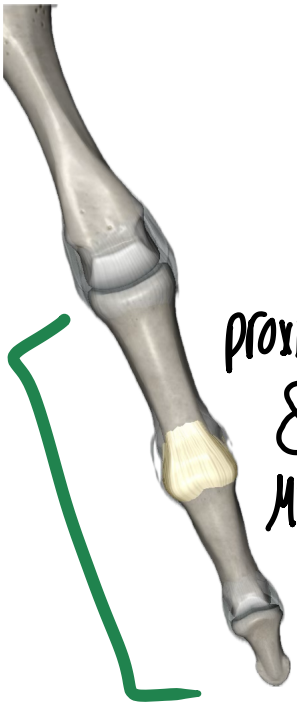
https://youtu.be/b892SoE76P4?feature=shared

- Interphalangeal joints :

Hinge synovial

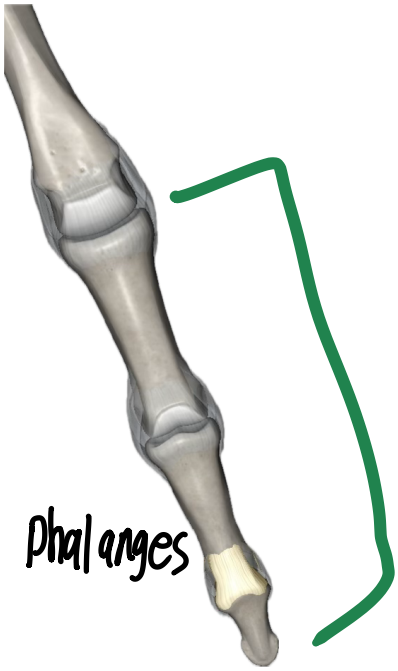
Movement :
Flexion & Extension

Proximal



proximal & Middle phalanges

Distal



Middle & distal phalanges

Zeina yassin