

# UPPER APPENDICULAR SKELETON

11/3/81, rvsd 11/7/96, 1 Nov 00, 5 Nov 01, 25 Oct 04, 26 Oct 05, 27Oct08, 2Nov09  
 Martini: 234-242, Martini's 6<sup>th</sup>: 244-259, 7<sup>th</sup>: 239-255, 8<sup>th</sup>: 247-254

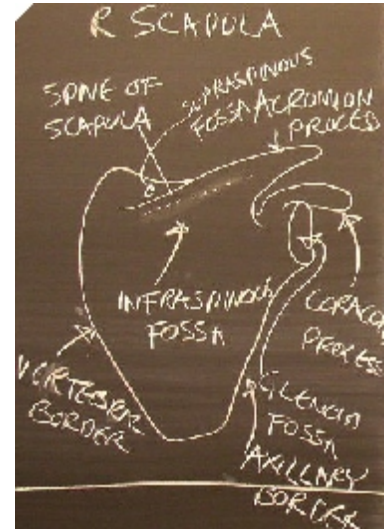
**Appendicular skeleton:** includes upper and lower limbs & anchoring bones which articulate with axial skeleton.

**Pectoral Girdle: clavicle and scapula** (only contact with axial is thru **manubrioclavicular joint.**)

247 clavicle articulates with acromion process on scapula

**Clavicle:** (key) **medial end** enlarged, blunt, articulates with manubrium  
 249 **lateral end** flattened, articulates with acromion process. Acts as brace.  
 break clavicle, whole shoulder collapses

**Scapula** (shovel): lies over 2nd to 7th ribs.  
 249 **borders:** superior, axillary, vertebral (or medial and lateral)  
**angles:** superior and inferior  
**glenoid fossa** articulates with head of humerus  
**supra glenoid tubercle** for biceps long head attachment  
**coracoid process** (beak-like) hooked, anchor for biceps short head  
**spine of scapula** along posterior portion  
**acromion process** (highest) articulates with clavicle



**Humerus:** head articulates with glenoid fossa, surrounded by anatomical neck.  
 (Surgical neck can break)

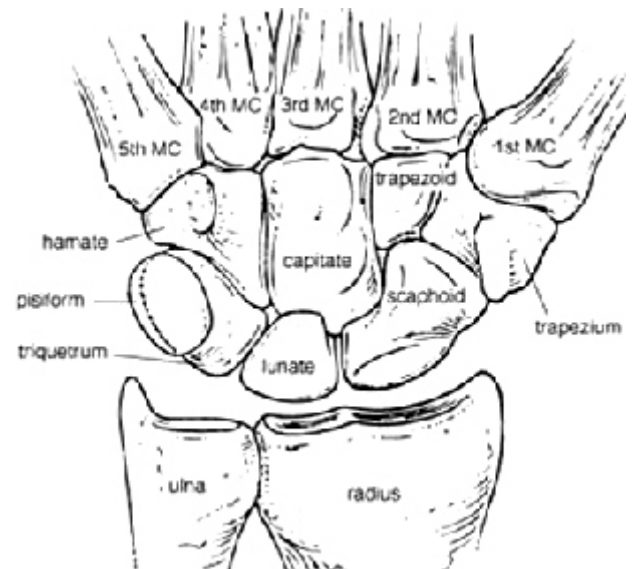
251 **greater tubercle** (anterior)  
**lesser tubercle** (lateral)  
**deltoid tuberosity** insertion of deltoid  
**epicondyles** medial and lateral at distal end  
**capitulum** articulates with radius  
**trochlea** articulates with ulna  
**olecranon fossa** on posterior side, receives olecranon process  
**coronoid fossa** on anterior side, receives coronoid process

**FOREARM:**

**Ulna:** (elbow)  
 252 **olecranon** (elbow): proximal projection: possess  
**trochlear notch** articulates with trochlea  
**coronoid process** possesses radial notch  
**head**  
**styloid process**

**Radius:** lies lateral to ulna, distally, articulations with ulna and carpals. Tied to ulna by interosseus mem.

**head** articulates with radial notch  
**radial tuberosity** insertion of biceps brachii  
**styloid process** projects laterally



**WRIST:** eight bones in two rows: (carpus) carpals  
 proximal, lat to med: **scaphoid** (navicular) (boat shape)  
 253 **lunate** (moon like)

**triquetrum** (triangular)  
**pisiform** (pea shaped)  
 distal, lat to medial **trapezium** (irregular, 4 sided) 1<sup>st</sup> metacarpal (saddle joint of thumb)  
**trapezoid** (2 parallel sides) 2<sup>nd</sup> metacarpal  
**capitate** (head shaped) 3<sup>rd</sup> metacarpal  
**hamate** (hooked) 4<sup>th</sup> and 5<sup>th</sup> metacarpal

scaphoid and lunate articulate with radius, forming wrist joint. 70% of carpal fractures are of scaphoid

Back of hand **metacarpals** numbered 1-5 fr lateral (thumb) to medial  
 fingers: 14 **phalanges**, numbered as metacarpals, **proximal, middle and distal**  
 the thumb has only prox and distal phalanges