

# UPPER APPENDICULAR SKELETON

revised 29 Sept 2016

Martini: 234-242, Martini's 6<sup>th</sup>: 244-259, 7<sup>th</sup>: 239-255, 8<sup>th</sup>: 247-254, 9<sup>th</sup>: 233-240, 10<sup>th</sup>: 242-250

**Appendicular skeleton:** ["toward, hand"] upper and lower limbs & bones which articulate with axial skeleton.

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

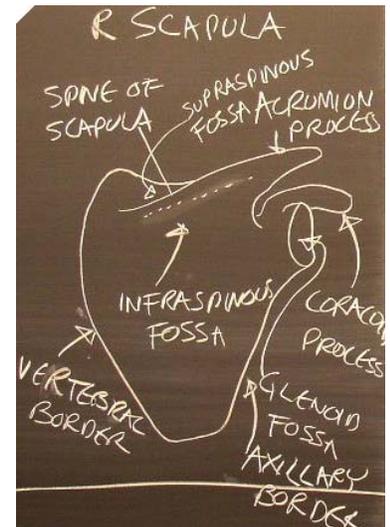
243 clavicle articulates with acromion process on scapula

**Clavicle:** ["key little"] **medial end** enlarged, blunt, articulates with manubrium  
244 **lateral end** flattened, articulates with acromion process. Acts as brace.

If you break clavicle, whole shoulder collapses.

**Scapula** ["shovel"]: lies over 2nd to 7th ribs.

245 **borders** superior, axillary, vertebral (or medial and lateral)  
**angles** superior and inferior  
**glenoid fossa** ["socket-like"] articulates with head of humerus  
**supra glenoid tubercle** ["above" and "bump little"] anchor for biceps long head  
**coracoid process** ["beak-like"] hooked anchor for biceps short head  
**spine of scapula** along posterior portion, palpable on one's back  
**acromion process** ["highest point"] articulates with clavicle



**Humerus:** ["shoulder"] proximal head forms "ball and socket" of shoulder  
**head** ball-like, articulates with glenoid fossa  
**necks** **anatomical** (rim of head) & **surgical:** can break  
**tubercles** **greater:** lateral; **lesser:** medial. **intertubercular groove**  
**deltoid tuberosity** insertion of deltoid  
**epicondyles** medial and lateral at distal end  
**capitulum** ["head little"] articulates with radius  
**trochlea** ["pulley"] articulates with ulna  
**olecranon fossa** ["elbow"] on posterior side, receives olecranon process  
**coronoid fossa** ["crown like"] on anterior side, receives coronoid process

## FOREARM:

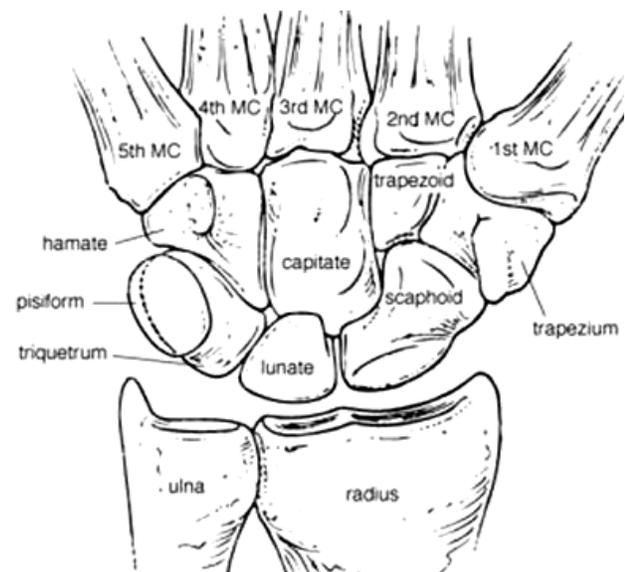
**Ulna:** ["elbow"] medial bone of forearm  
248 **olecranon** ["elbow"] proximal projection:

olecranon features:

**trochlear notch** articulates with trochlea  
**coronoid process** possesses radial notch  
**head**  
**styloid process**

**Radius:** lateral forearm bone, articulates with humerus, ulna and carpals. Tied to ulna by interosseus membrane.

**head** articulates with radial notch  
**radial tuberosity** insertion of biceps brachii  
**styloid process** ["pencil like"] projects laterally



**WRIST:** eight bones in two rows: (carpus) carpals ["wrist"]  
proximal, lat to med: **scaphoid** ["boat shape"] (alias navicular)

249 **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: **proximal, middle and distal** phalanges. Phalanx ["finger"]. numbered as metacarpals.  
the thumb has only prox and distal phalanges