

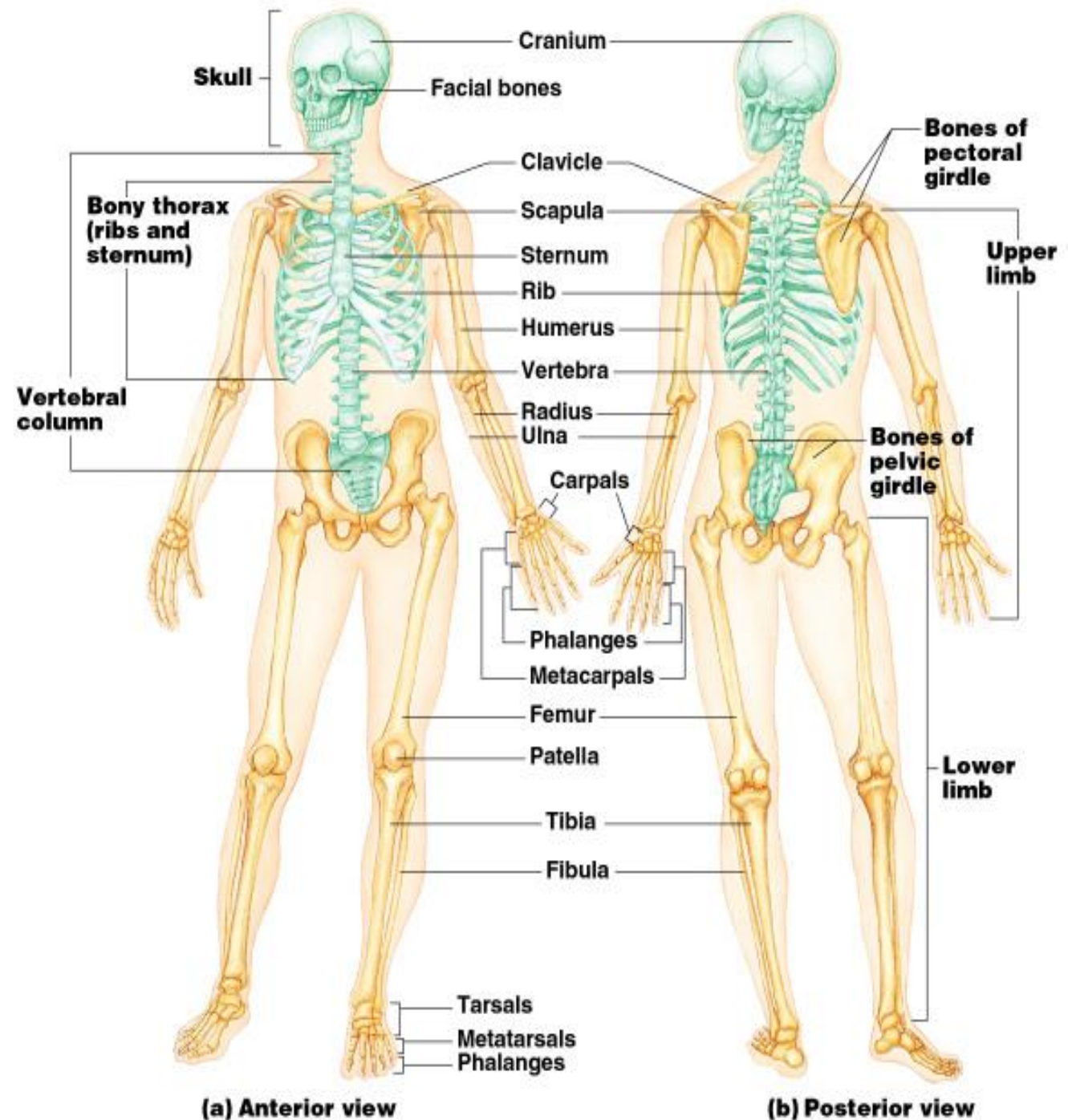
Unit 6 - Appendicular Skeletal Anatomy

Bone Facts of the Human Body

- The fetal human body has 300 bones
- The adult human body has 206 bones
 - About half of these bones are in your hands and feet
- Humans & Giraffes have the same number of neck bones
- Longest bone in the body = Femur
- Smallest bone in the body = Inner Ear Bones (Hammer, Anvil, Stirrup)

Appendicular Skeleton

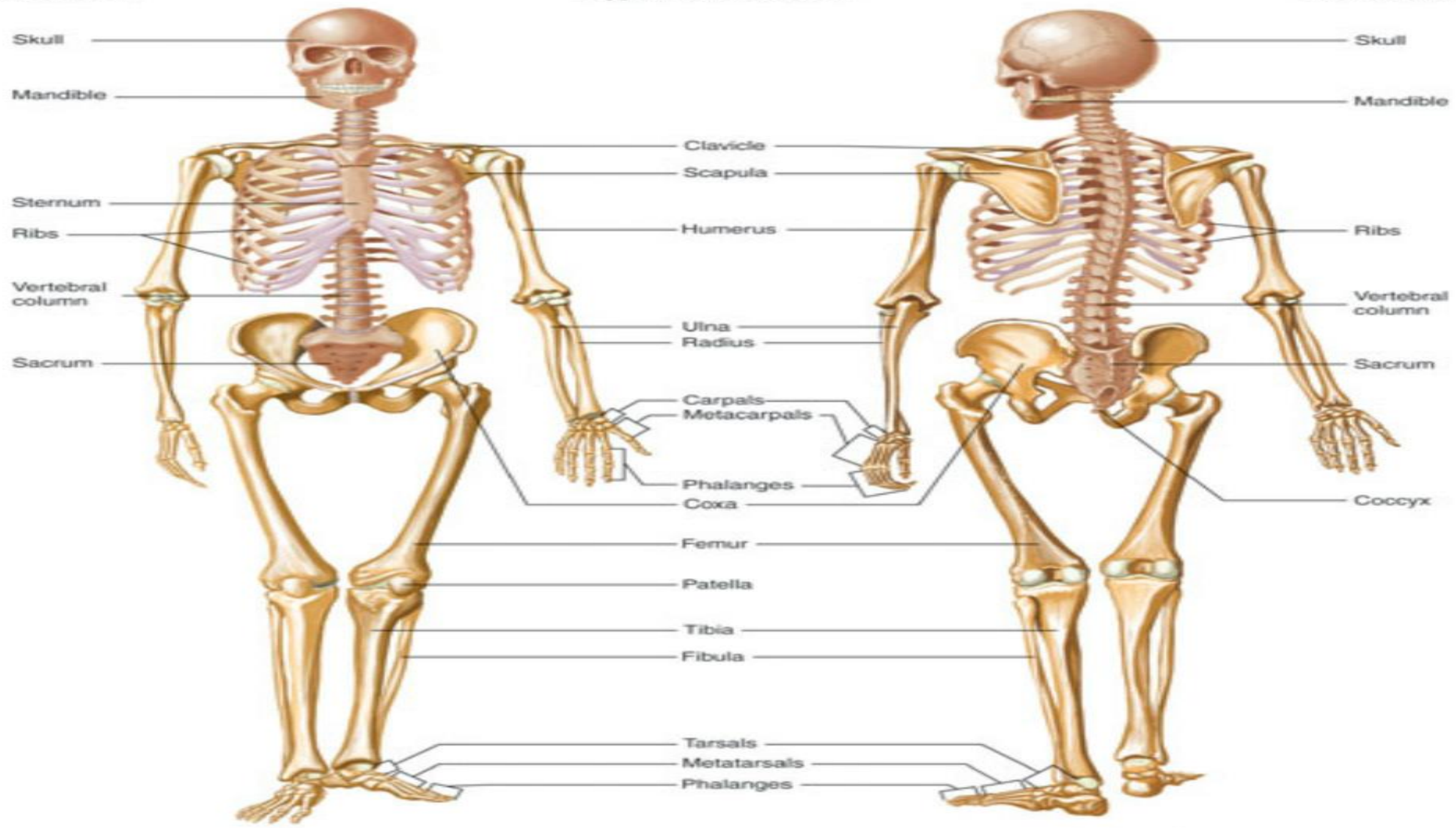
- 126 out of 206 bones in the appendicular skeleton
- Contains
 - Limbs (Appendages)
 - Pectoral (Shoulder) Girdle
 - Pelvic (Pelvis) Girdle



Axial Skeleton

Appendicular Skeleton

Axial Skeleton



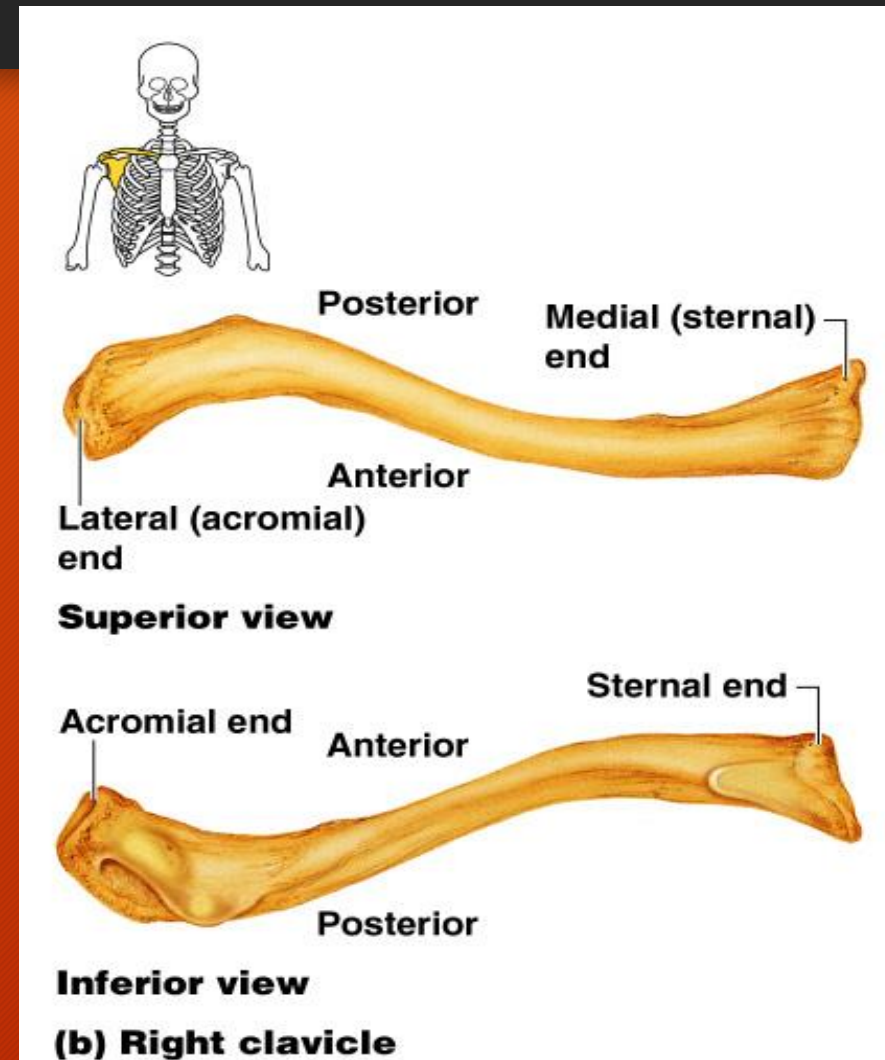
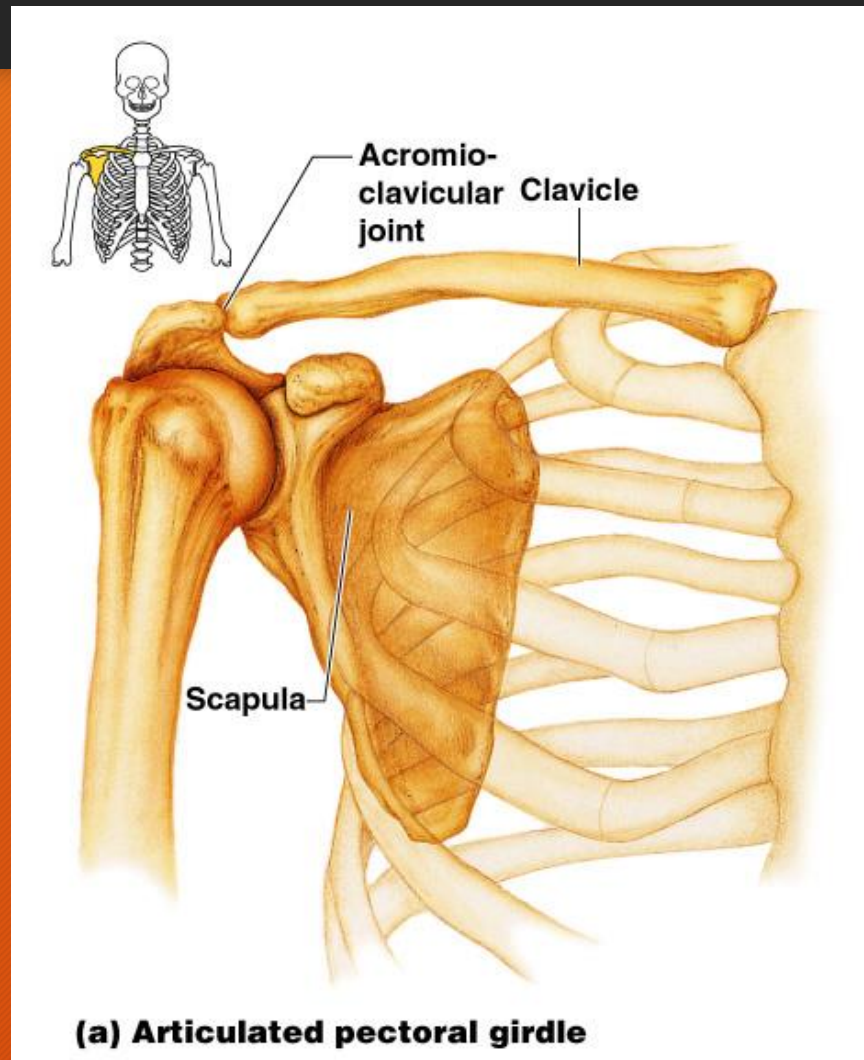
Anterior

Posterior

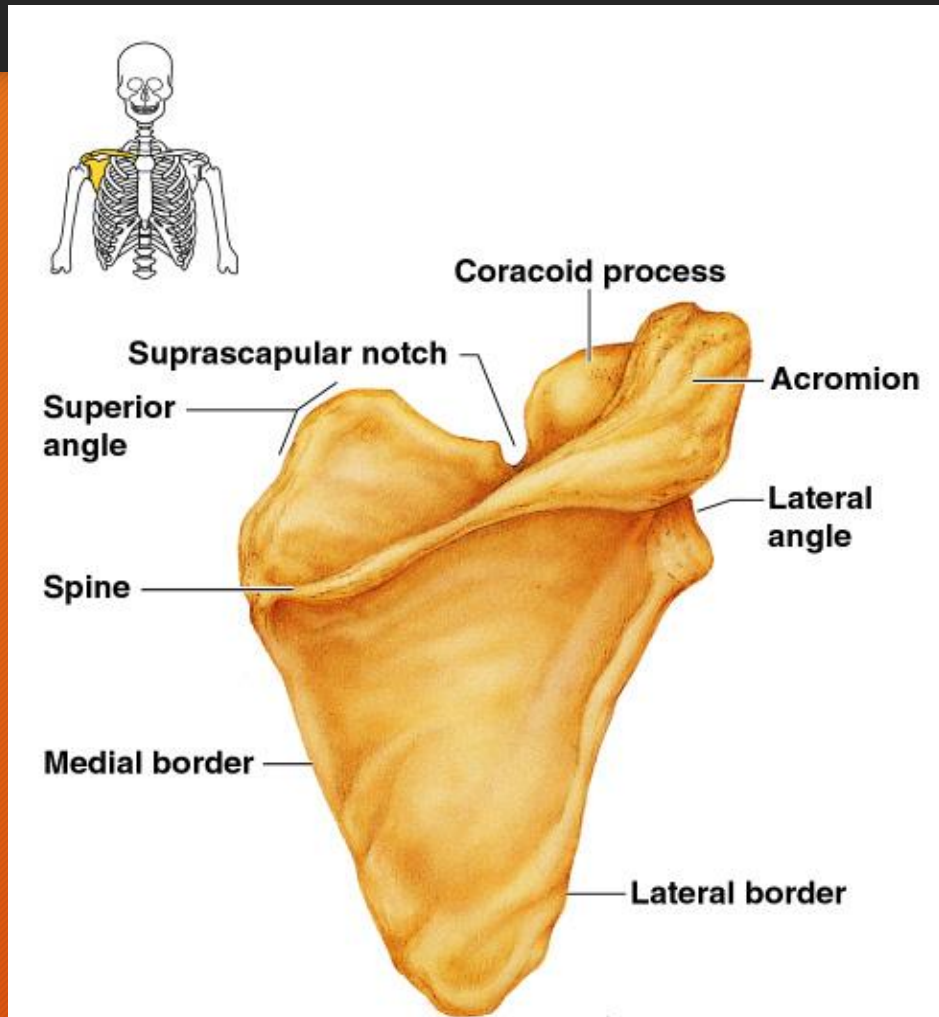
The Pectoral (Shoulder) Girdle

- Composed of 2 bones:
 - Clavicle - collarbone
 - Saapula - shoulder blade
- These bones allow the upper limb to have exceptionally free movement

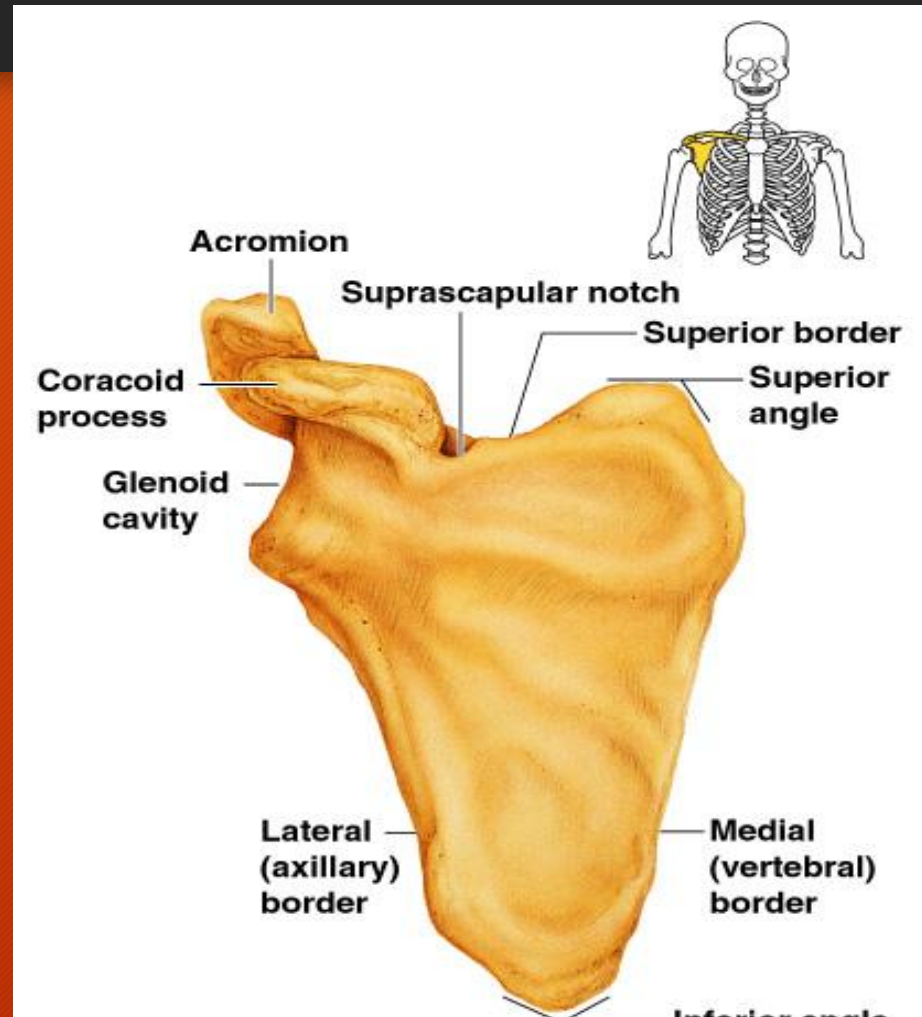
Bones of the Pectoral (Shoulder) Girdle



Bones of the Pectoral (Shoulder) Girdle



(c) Right scapula, posterior aspect



(d) Right scapula, anterior aspect

Acromion process

Spine of scapula

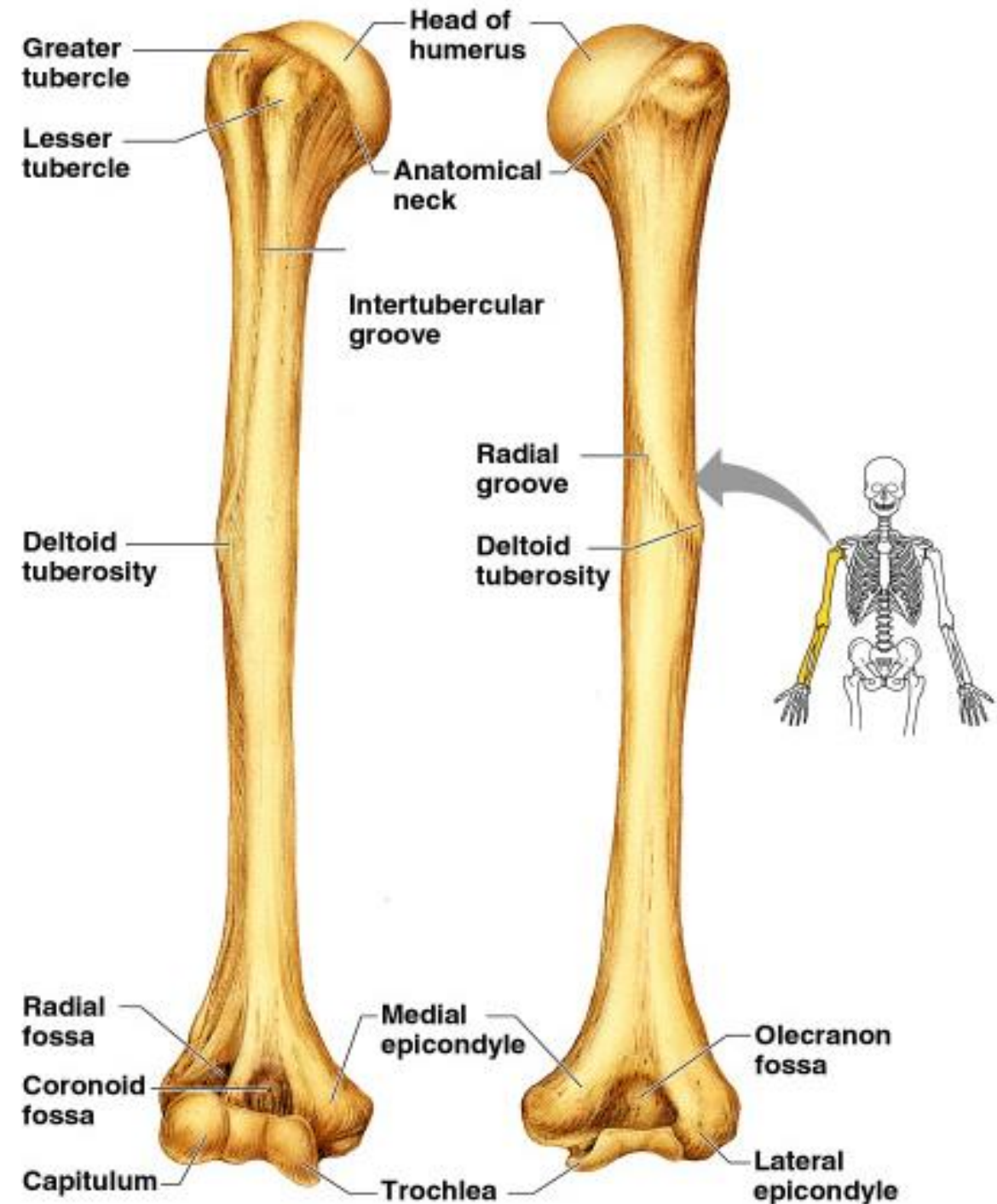
Scapula

Clavicle



Bones of the Upper Limbs

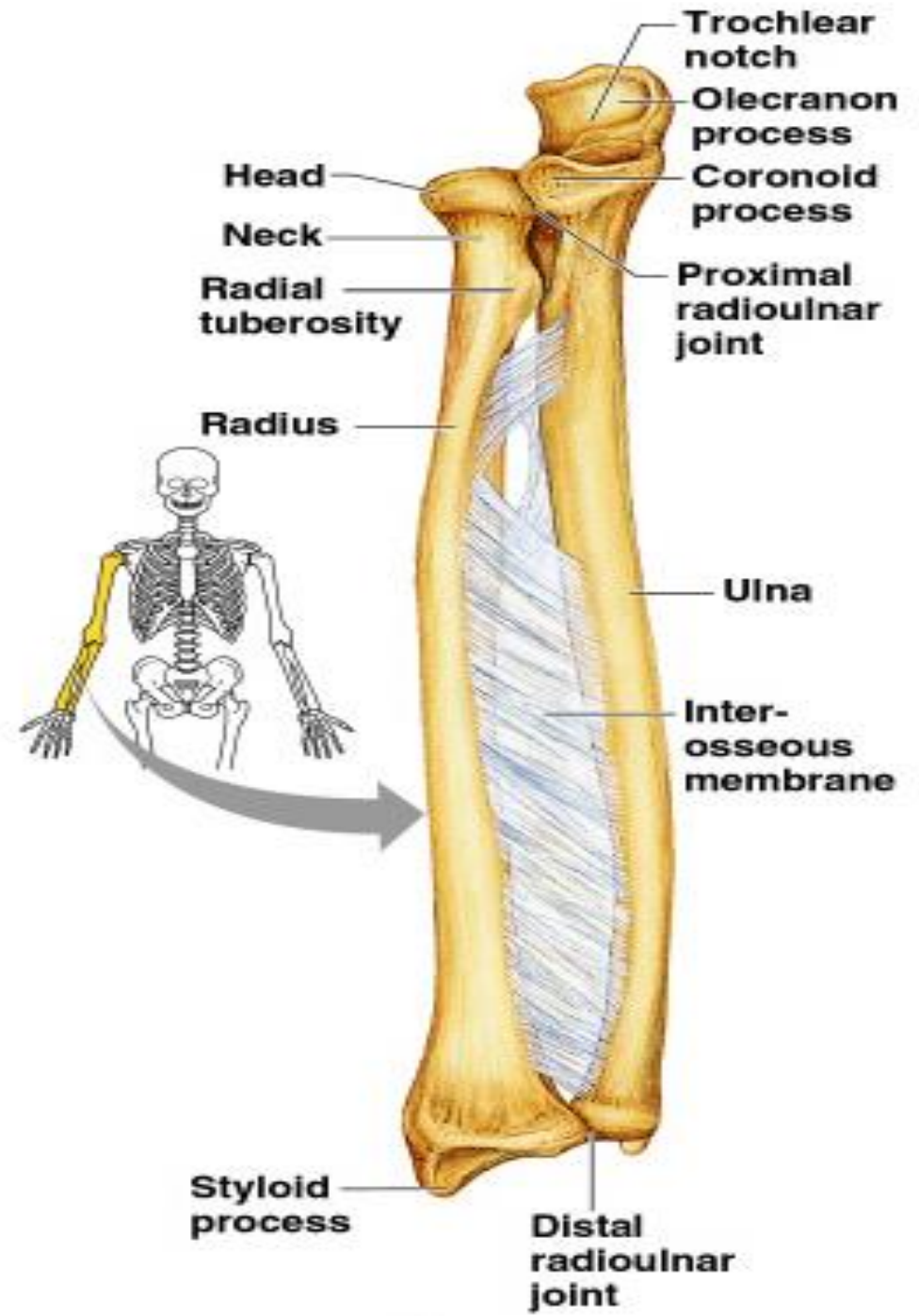
- The arm is formed by a single bone
 - Humerus





Bones of the Upper Limbs

- The forearm has 2 bones
 - Ulna (inner bone in anatomical position)
 - Radius (outer bone in anatomical position)



olecranon process →

trochlear notch →

coronoid process →

Head of radius →

Neck of radius →

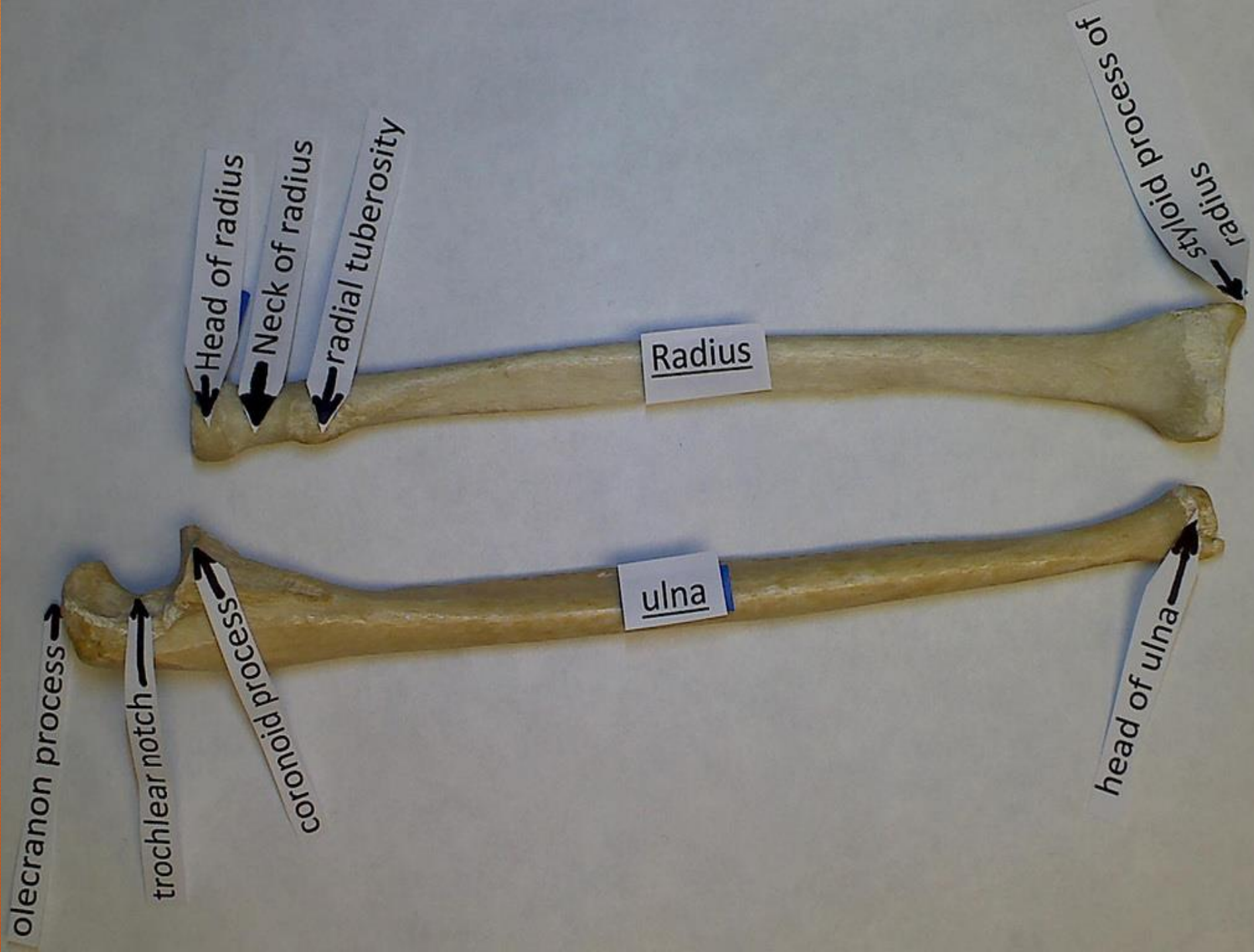
radial tuberosity →

ulna

head of ulna →

Radius

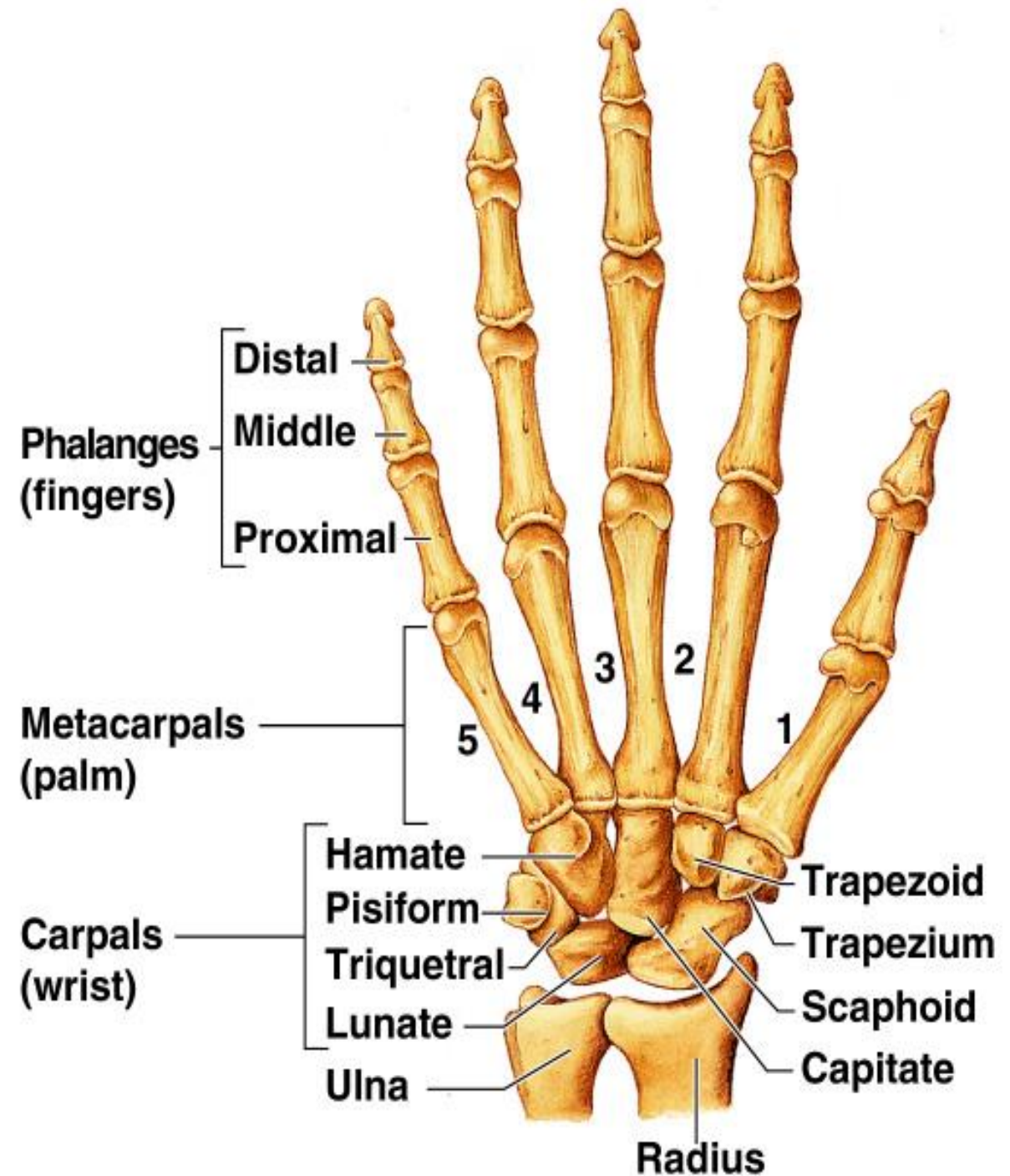
styloid process of radius →

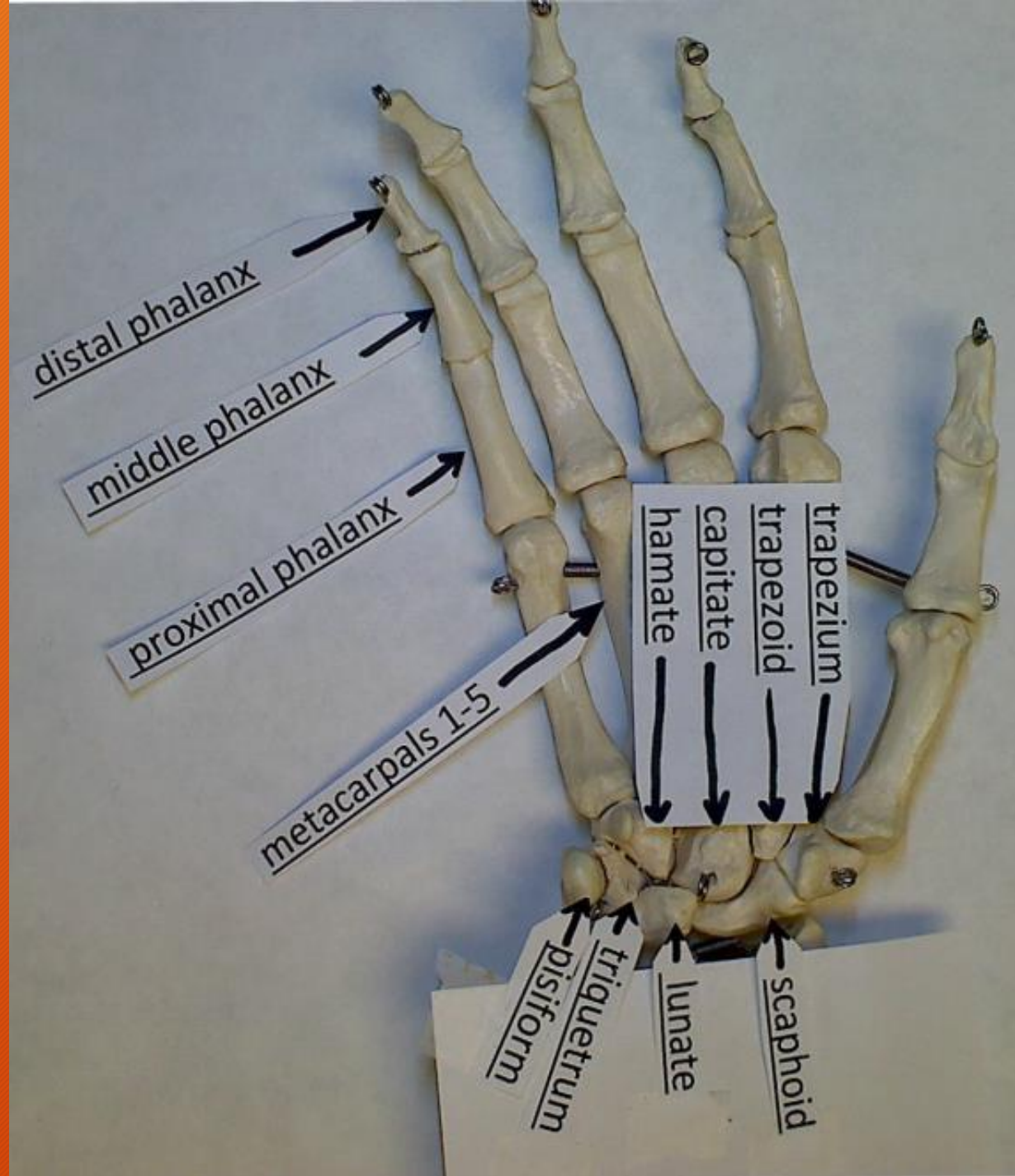


Bones of the Upper Limbs

- The Hand

- Carpals = wrist
- Metacarpals = palm
- Phalanges = fingers





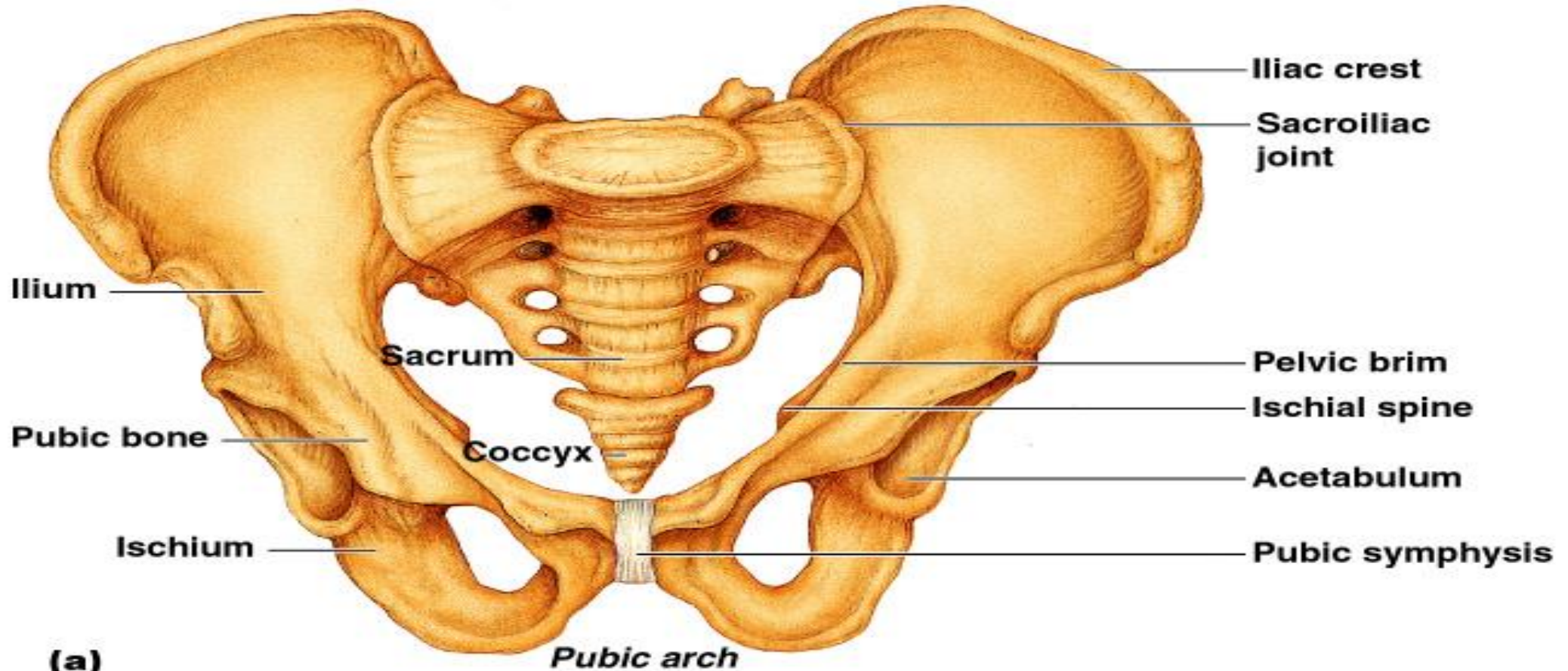
Bones of the Pelvic Girdle

- Hip bones
 - Composed of 3 pair of fused bones
 - Ilium
 - Ischium
 - Pubic bone
- Total weight of the upper body rests on the pelvis
- Protects several organs
 - Reproductive organs
 - Urinary bladder
 - Part of the large intestine

The Pelvis

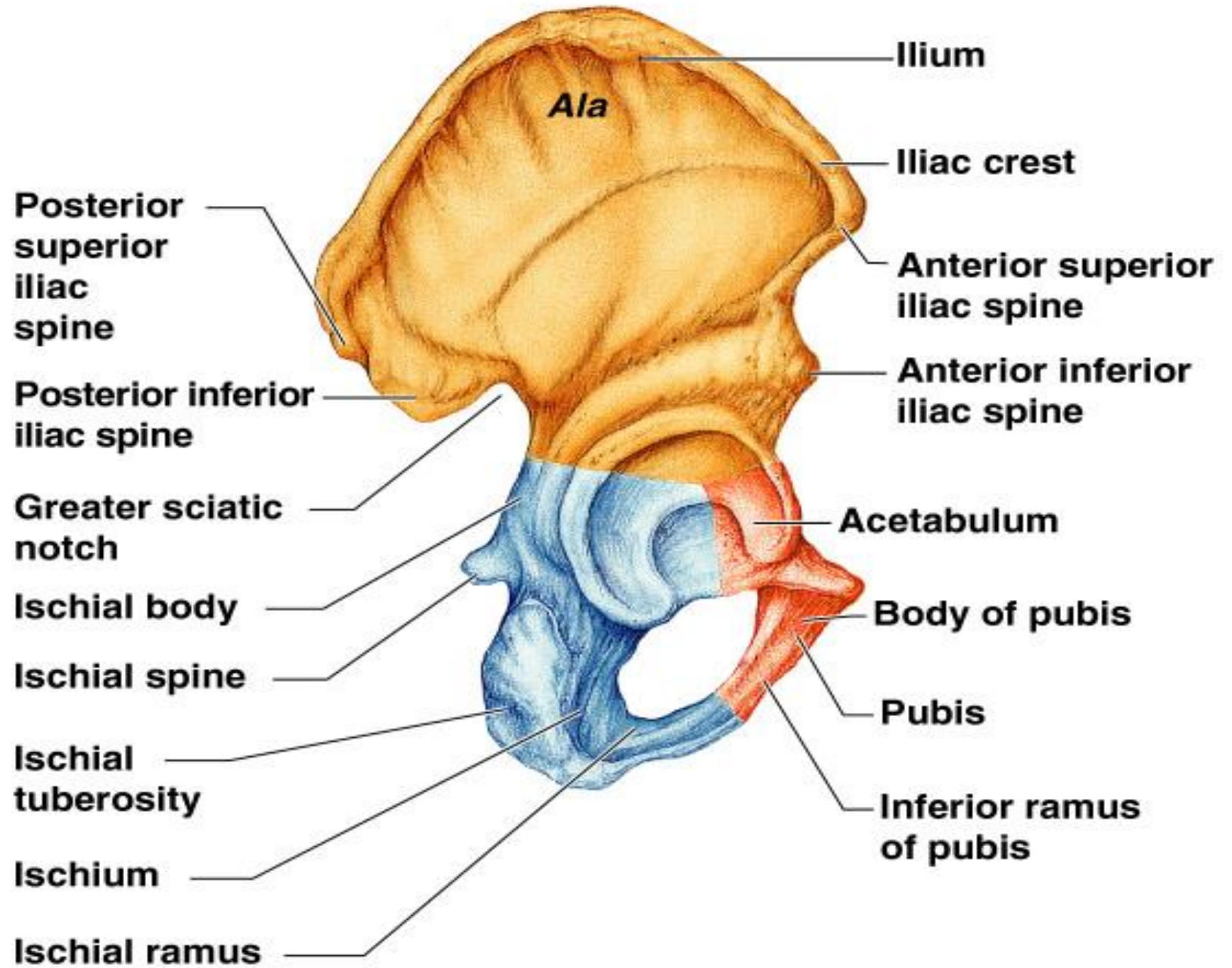


Coxal bone
(or hip bone)

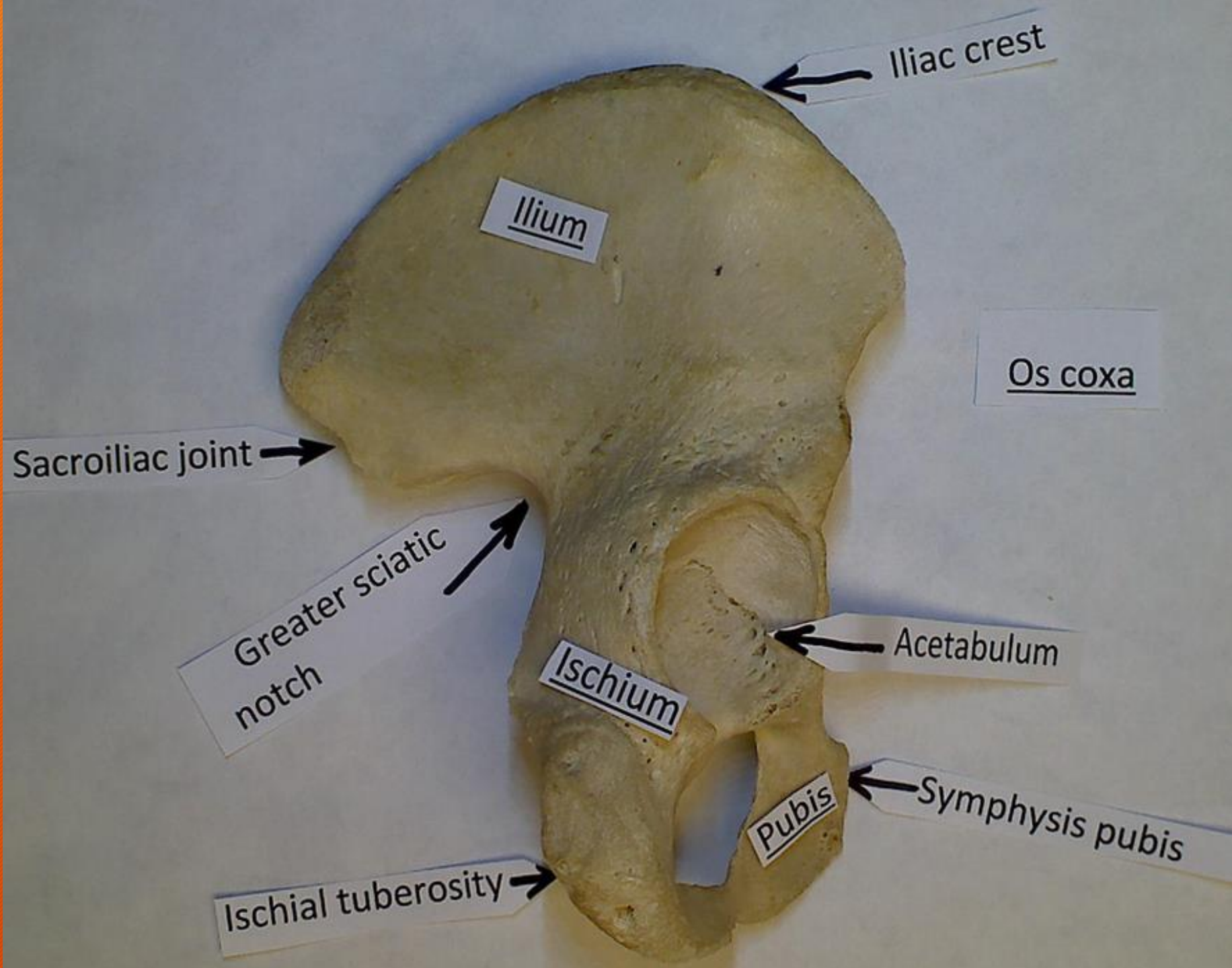


(a)

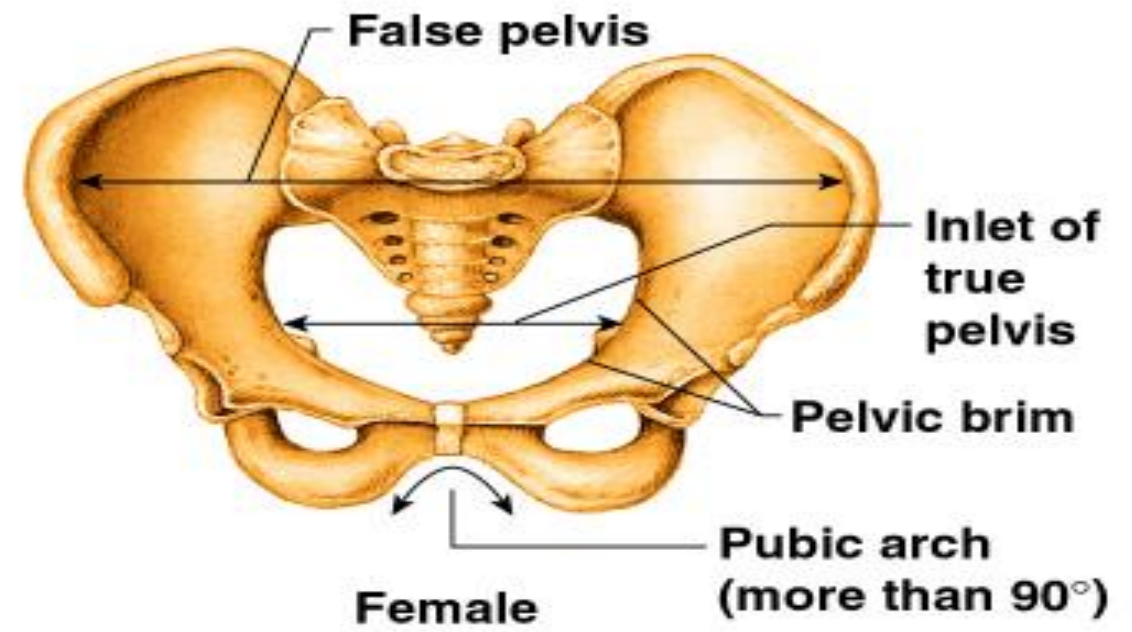
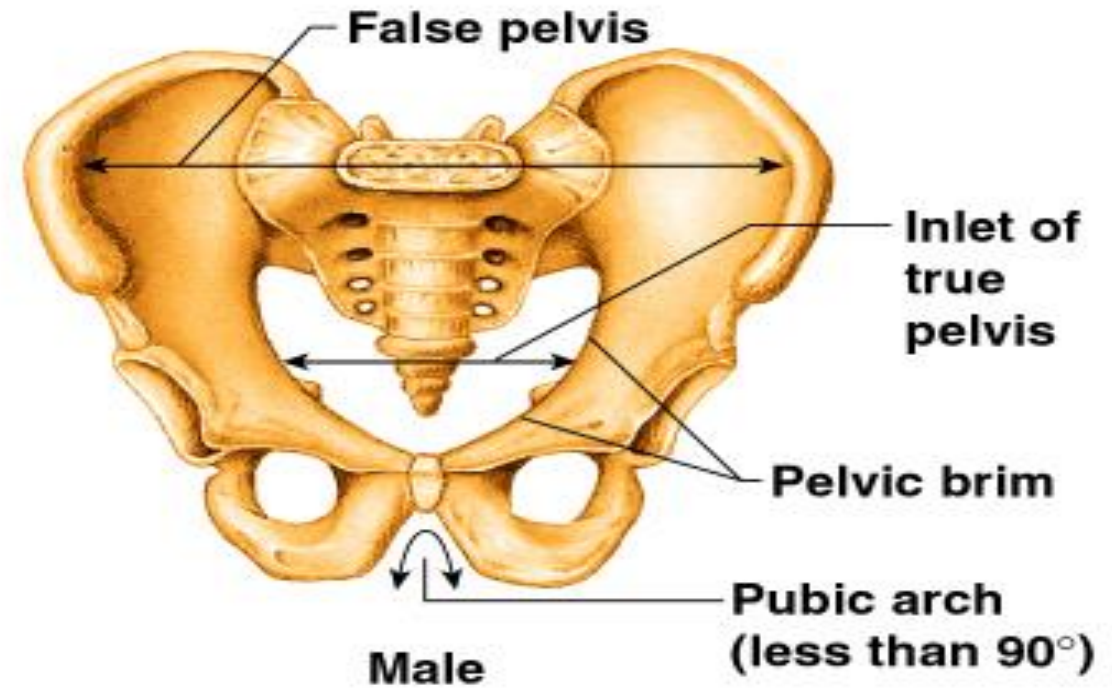
The Pelvis



(b)

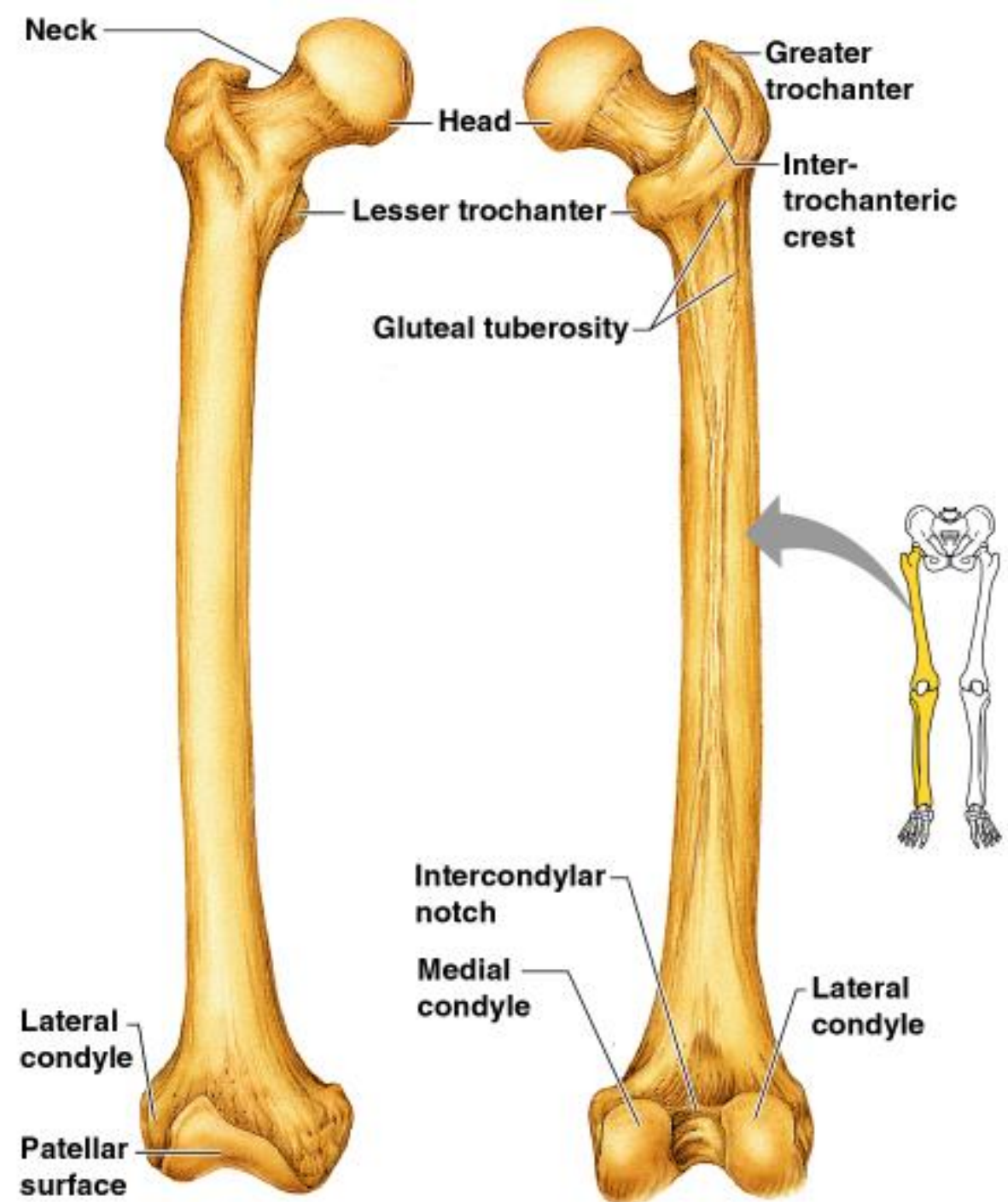


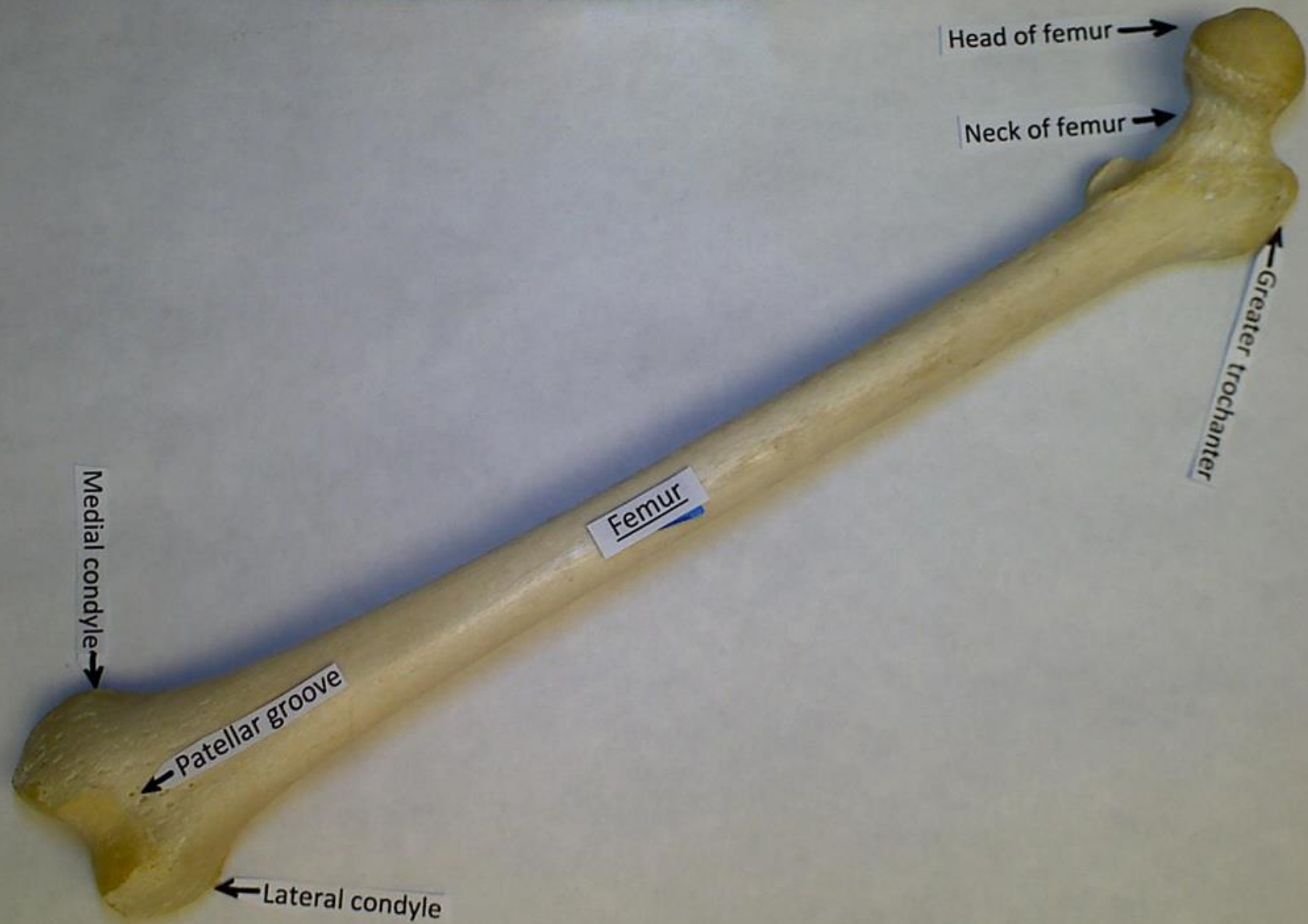
Gender Differences in the Pelvis



Bones of the Lower Limbs

- The thigh has 1 bone
 - Femur = thigh bone





Head of femur →

Neck of femur →

Greater trochanter

Femur

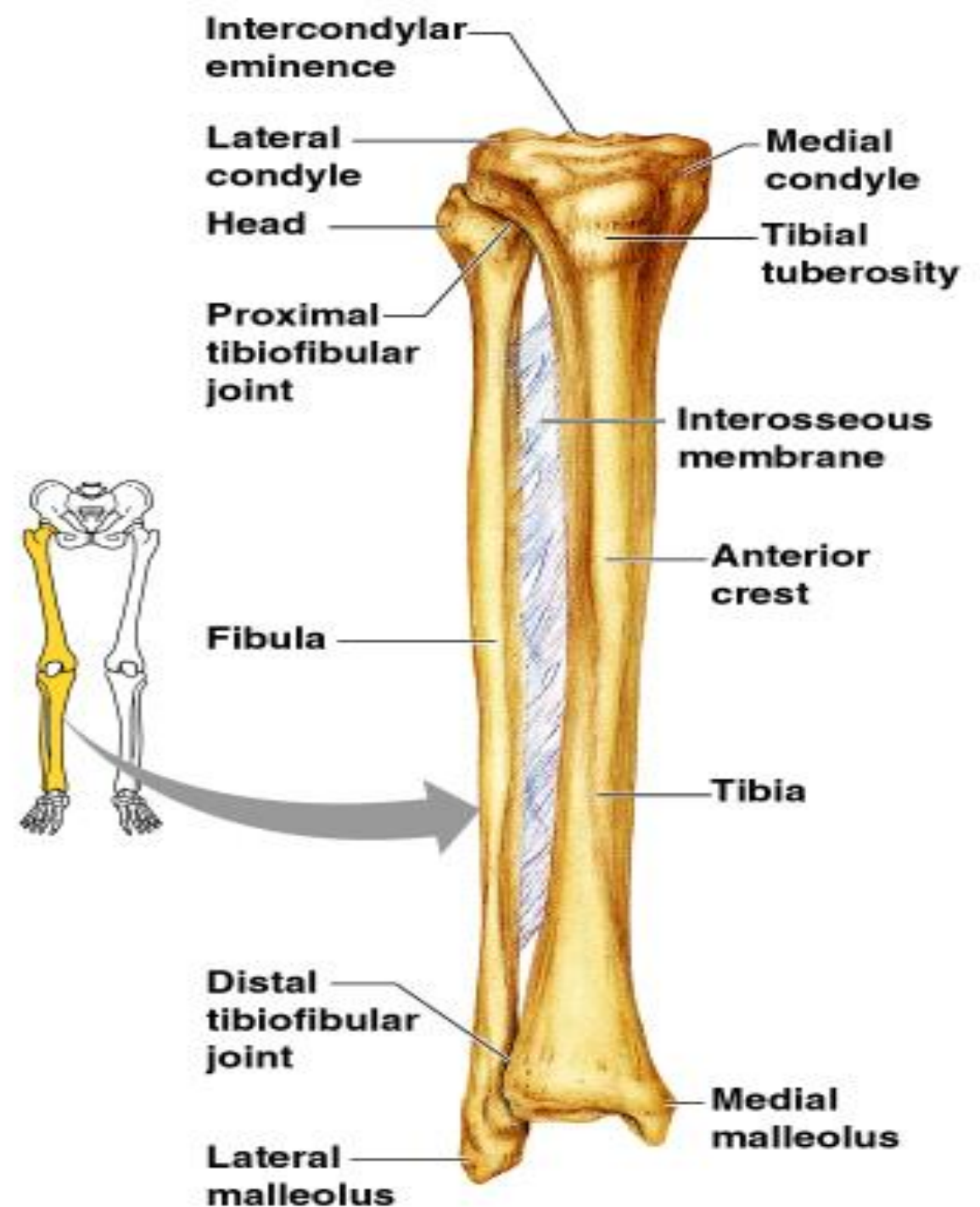
Medial condyle →

Patellar groove

Lateral condyle

Bones of the Lower Limbs

- The leg has 2 bones
 - Tibia (outer bone in anatomical position)
 - Fibula (inner bone in anatomical position)





Patella

Tibial tuberosity →

Intercondylar eminence →

Tibia

Anterior crest →

head of fibula →

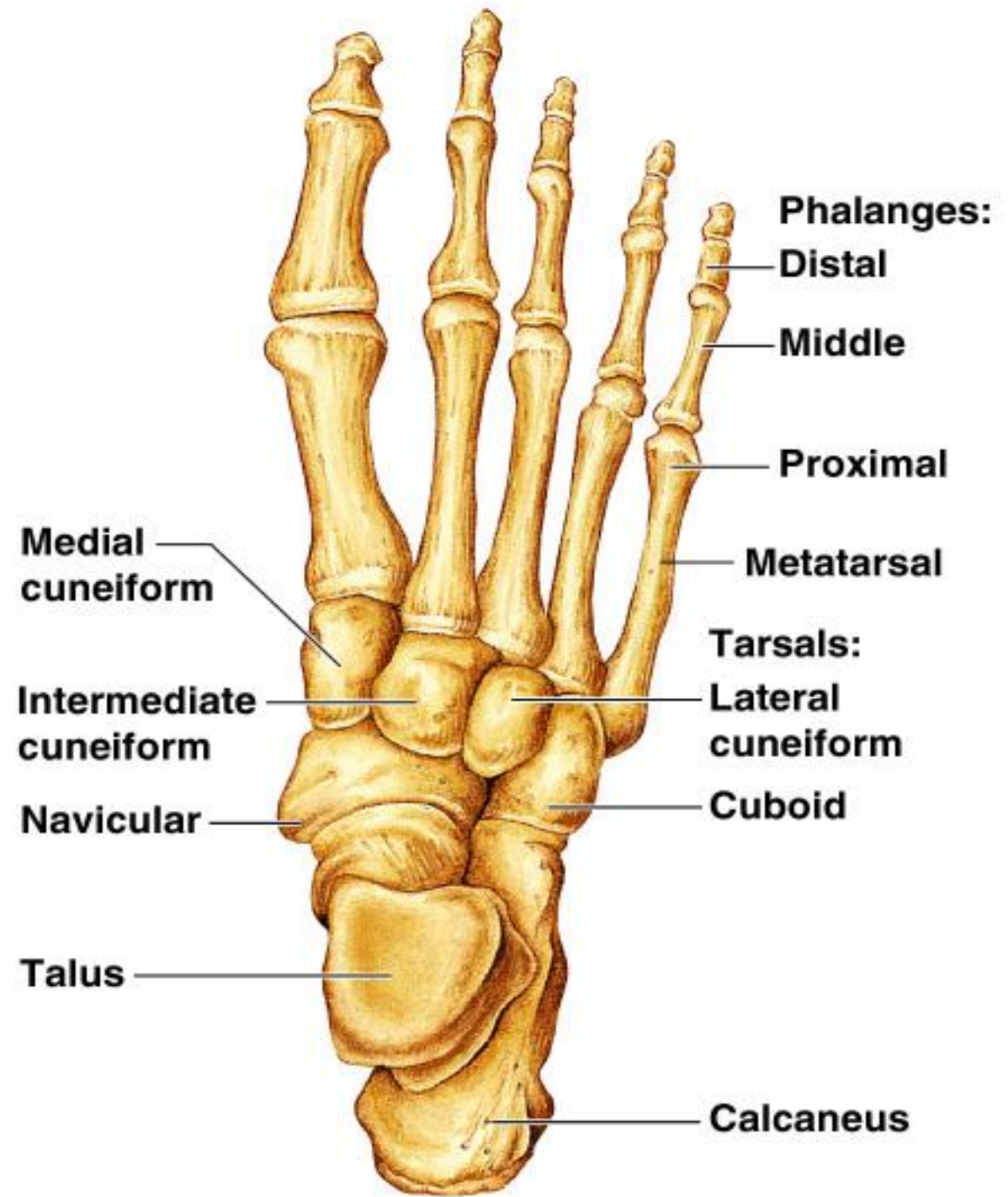
Fibula

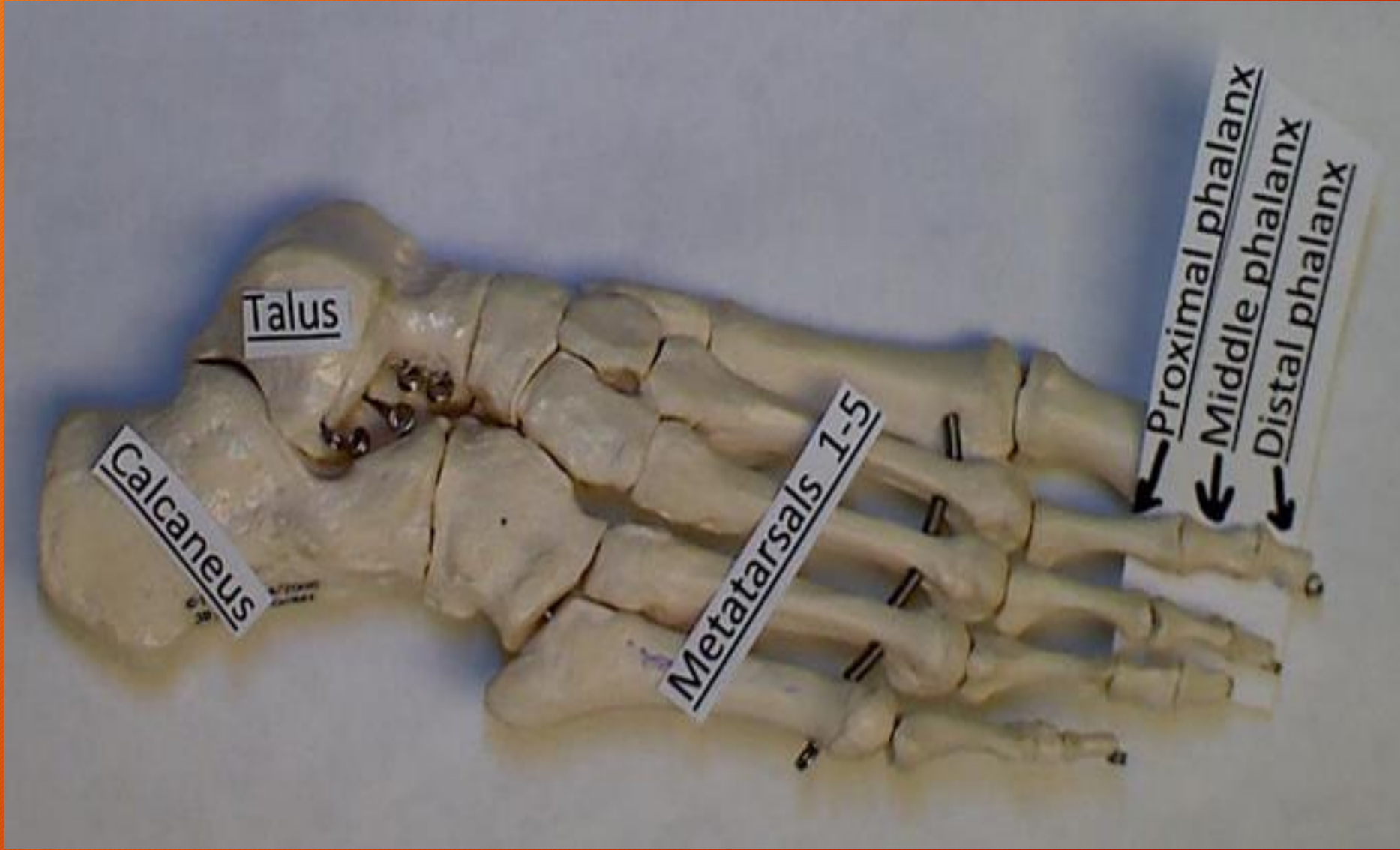
Medial malleolus →

Lateral malleolus →

Bones of the Lower Limbs

- The Foot
 - Tarsus = ankle
 - Metatarsals = sole
 - Phalanges = toes





Arches of the Foot

- Bones of the foot are arranged to form 3 strong arches
 - 2 longitudinal
 - 1 transverse

