

LOWER APPENDICULAR SKELETON

revised 4 October 2016

Martini's 5th: 234-242, Martini 6th: 249-257, 7th: 245-255, 8th: 247-264, 10th: 250-261

Pelvic Girdle formed from two **os coxae** ["bone hip"] which articulate with **sacrum (sacroiliac joint)**. Front: **pubic symphysis**

OS COXA (p 251)

acetabulum ["vinegar cruet"]
obturator foramen

Ilium: ["flat"] **iliac crest**
iliac fossa

anterior superior iliac spine
arcuate line

Ischium ["hip"]

greater ischial spine
ischial tuberosity
ischial ramus

Pubis: ["hairy"]

superior ramus forms
inferior ramus

Pelvic cavities: false (greater pelvis) and true (lesser) pelvis = ["basin"]

pelvic brim
false pelvis
true pelvis

LEARN: in embryo formed from three bones, **ilium, ischium and pubis**

where ilium, ischium and pubis meet, articulate with femur.
Large hole below acetabulum
lateral top of "hip"

[smooth inner concave surface]
hard bony lateral anterior points

[bow shaped] lower portion of iliac fossa, **greater sciatic notch**

posterior inferior portion of os coxa, part of acetabulum

below sciatic notch

supports weight when sitting

arches to meet pubic ramus [branch]

pubic symphysis ["hairy growing together"]

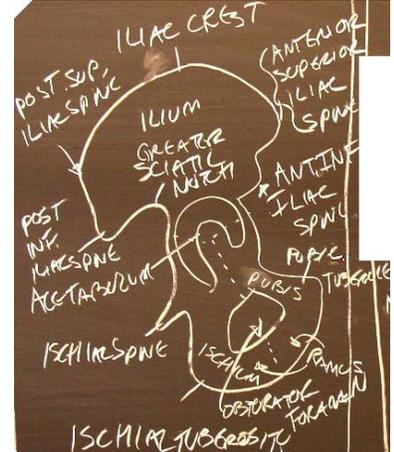
joins with ischial ramus

sacral promontory, upper margin symphysis-arcuate lines

surrounded by iliac fossa, abdominal wall

surrounded by bone: ilium, ischium, pubis, sacrum, coccyx.

top is the inlet, bottom is the outlet

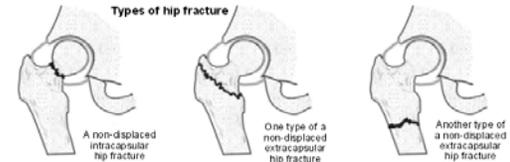


p 253: **Male Pelvis**

narrow ischial tuberosities
pubic angle acute
massive
narrow iliac spines
heart shaped inlet
oval obturator foramen
acetabulum faces laterally
curved ilium wing

Female Pelvis

wider ischial tuberosities
pubic angle obtuse
delicate
wide iliac spines
large circular inlet
triangular obturator foramen
acetabulum faces more anterior
straight ilium wing



FEMUR ["thigh"]: longest bone in body
255 **head**

neck

greater and lesser trochantors
linea aspera ["rough line"]
medial and lateral condyles
adductor tubercle

PATELLA: improves leverage of quadriceps femoris: largest **sesamoid bone:** form within tendons at compression sites, protects,

TIBIA: **medial and lateral condyles**
256 **intercondylar eminence**

["flute"] **tibial tuberosity**
anterior crest
medial malleolus

FIBULA: ["brooch"]

256 **head**
lateral malleolus:

ANKLE ["ankle"] seven tarsal bones:
257 **talus**

calcaneus
cuboid

navicular

medial cuneiform
intermediate cuneiform
lateral cuneiform

TOES:

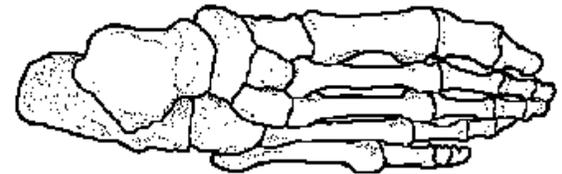
261 three cuneiforms articulate with **first three metatarsals: I, II, III**
cuboid with **last two metatarsals: IV, V.**

PHALANGES as in hand:

2nd-5th have proximal, middle, distal phalanges. **1st has no medial.**

Arches: supported mainly by ligaments (flat foot, or fallen arches can result from failure of these ligaments and plantar muscles)

longitudinal arch: from calcaneus to metatarsals and tarsals, medial portion greater than lateral [calcaneal].
transverse forms across at base of metatarsals



also around metacarpophalangeal and metatarsophalangeal joints