ARTICULATIONS

revised 6 October 2016
Martini 10th: 263-287

Joints classified according to 1) connecting material
2) movement

JOINT TYPES (table: p 265), connecting material tying together:

SYNARTHROSIS no appreciable movement (can be fibrous or cartilaginous)
- sutures only in skull: interdigitations [“between fingers condition”]
- gomphosis [“nail condition”] only between teeth and jaw
- synchondrosis [“together cartilage condition”] ex: epiphyseal cartilage, ribs and sternum

AMPHIARTHROSIS [“both joint condition”] tied by cartilage on both sides. slight movement
can be fibrous or cartilaginous
- syndesmosis: [“together bond condition”] ligamentous connection (or interosseus membrane)
ex: distal ends of tibia and fibula (has some give)
- symphysis: [“together grow condition”] fibrocartilaginous pad, compressible
  ex: pubic symphysis
  Inter vertebral discs.

DIARTHROSIS = synovial freely moveable, limited only by ligaments,
muscles or bone, characterized by synovial or fluid filled cavity.

SYNOVIAL JOINT [“like egg (white)”] (DRAW AND LEARN:)
Four features of a synovial joint (p. 266):
1. articular capsule encloses the joint, often strengthened by ligaments
2. articular cartilage each bone is covered by hyaline cartilage
  arthritis [“joint_inflamed”] always involves this
3. synovial membrane lines the inner surface of synovial capsule
4. synovial fluid secreted by synovial membrane, lubricates and
  nourishes, mucopolysaccharide (swollen joint(water on knee) too much of this)

some have articular discs: dense fibrous connective tissue (knee, sternoclavicular,
  distal radioulnar)

BURSAE AND TENDON SHEATHS:

Tendon sheaths separate tendon from joints they cross:
wrap around tendon, protects joint & ease of sliding tendon.
p. 368 for phalangeal tendon sheaths
fluid filled, double walled, tendon slides through.
(Carpal tunnel syndrome when inflamed in wrist)

Bursae: [“wineskin”]
small fluid filled sacs, cushion.
some subcutaneous (ex: olecranon process of elbow)
most are found between tendons and bone.