

# ARTICULATIONS

revised 6 October 2016

S&M p 163-, Martini 5th: 246-268, Martini 6th: 263-289, 7th: 259-272, 8th: 268-272

Martini 10th: 263-287

Joints classified according to

- 1) **connecting material**
- 2) **movement**

suture between R and L parietal:



**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

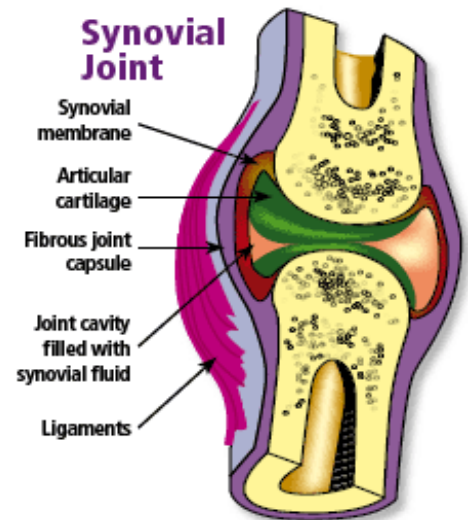
- syndesmosis:** [“together bond condition”] *ligamentous* connection (or interosseus membrane)  
**ex:** distal ends of tibia and fibula (has some give)
- symphysis:** [“together grow condition”] *fibrocartilaginous* pad, compressible  
**ex:** pubic symphysis  
Inter vertebral discs.

**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  
secreted by synovial membrane, lubricates and nourishes, mucopolysaccharide (swollen joint(water on knee) too much of this)
4. **synovial fluid**



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.

