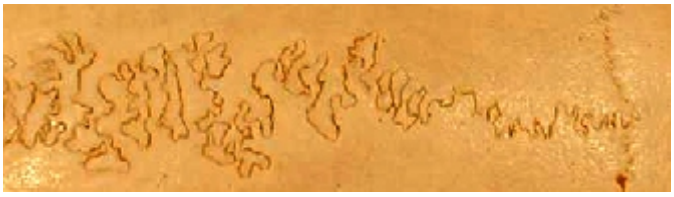
ARTICULATIONS

11/10/81, rvsd 11/12/96, 6 Nov 00, 13 Nov 02, 10 Nov 03, 29 Oct 07, 10Nov08, 4Nov09, 8Nov10, 7Nov11 suture between R and L parietal:
S&M p 163-, Martini 5th: 246-268, Martini 6th: 263-289, 7th: 259-272, 8th: 268-272



Joints classified according to 1) material that connects
2) movement

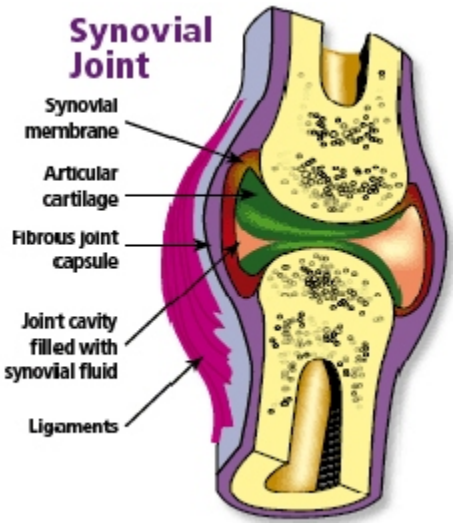
Joint types (table: p 255), based on material tying them together:

SYNARTHROSIS *no appreciable movement* (can be fibrous or cartilaginous)
- **sutures** only in skull: interdigitations,
- **gomphosis** only between teeth and jaw
- **synchondrosis** **ex:** epiphyseal cartilage joins epiphysis & diaphysis, ribs and sternum

AMPHIARTHROSIS *slight movement* (can be fibrous or cartilaginous) (amphi: on both sides: tied by cartilage on both sides)
- **syndesmosis:** held together by *ligamentous* connection (or interosseus membrane)
  - **ex:** distal ends of tibia and fibula (has some give)
- **symphysis**: *fibrocartilaginous* pad, compressible
  - **ex:** pubic symphysis
  - vertebral discs.

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

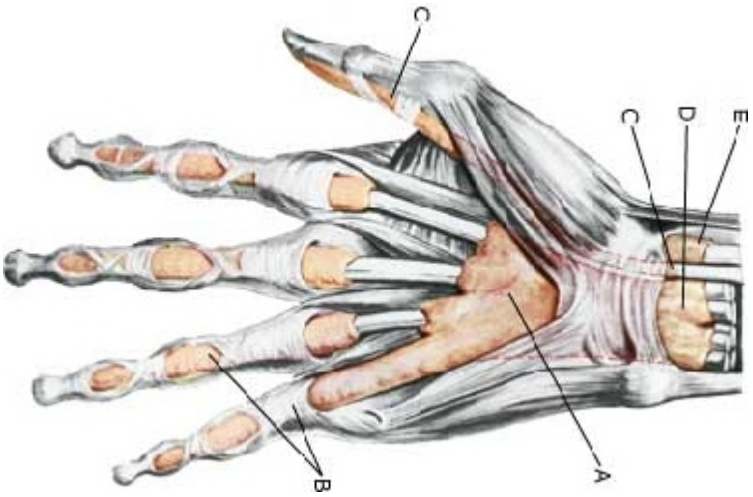
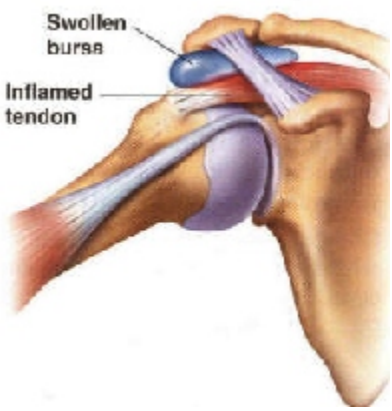
SYNOVIAL JOINT



Four features of a synovial joint (p. 256):
1. **articular capsule** encloses the joint, often strengthened by ligaments
2. **articular cartilage** of each bone is covered by hyaline cartilage (**arthritis** 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: provide protection, ease of sliding tendon.
(P. 358 for phalangeal tendon sheaths)
fluid filled, double walled, tendon slides through.
(Carpal tunnel syndrom 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.