SKELETAL ARTICULATIONS

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SKELETAL ROM

- Synarthroses (fibrous)
- Sutures
- Syndesmoses
- Gomphoses
- Amphiarthroses (cartilagenous)
  - Synchondroses (hyaline cartilage)
  - Symphyses (fibrocartilage)
- Diarthroses (synovial capsule)
  - Hinge
  - Plane
  - Ball-and-Socket
  - Saddle
  - Pivot

SYNOVIAL JOINTS

- Articular Cartilage - cushions bone ends
- Fibrous Capsule - binds bone ends together
- Joint Cavity - lined by synovial membrane that makes synovial fluid
- Ligaments - bind joints from the side to resist shearing movements

Articular Cartilage
Synovial Membrane
Joint Cavity
Epiphysis
Periosteum
Ligaments
Fibrous Capsule
**HINGE DIARTHROSES**

*Actions:*
- Flex/Extend
- Elevate/Depress
- Plantar flex/Dorsiflex
- Inversion/Eversion

**PLANE DIARTHROSE**

*Actions:*
- Gliding

**BALL-AND-SOCKET**

*Actions:*
- Flex/Extend
- Abduct/Adduct
- Rotate/Circumduct
SADDLE DIARTHROSIS

Actions:
- Flex/Extend
- Abduct/Adduct
- Circumduct
- Opposition

PIVOT DIARTHROSES

Actions:
- Rotate
- Pronate/Supinate

ACTIONS (MOVEMENTS) AT JOINTS

- Flexion (close hinge) vs. Extension (open hinge)
- Abduction (take away) vs. Adduction (add back)
- Plantar Flexion (toes down) vs. Dorsiflexion (toes up)
- Eversion (sole out) vs. Inversion (sole in)
- Gliding (sliding at planes)
- Rotation (at a point) vs. Circumduction (in a cone shape)
- Protraction (forward) vs. Retraction (back again)
- Elevation (up) vs. Depression (down)
- Opposition (of thumb)
POTENTIAL JOURNAL CRITIQUE TOPICS?

- Osteoarthritis and Rheumatoid Arthritis?
- Fibromyalgia and Gout?
- Hip, Knee, and Elbow Replacements?
- Menisci and Ligament Surgery in Athletes?
- Symphysis pubis dysfunction?
- Conditions due to Synovitis?