

Joints

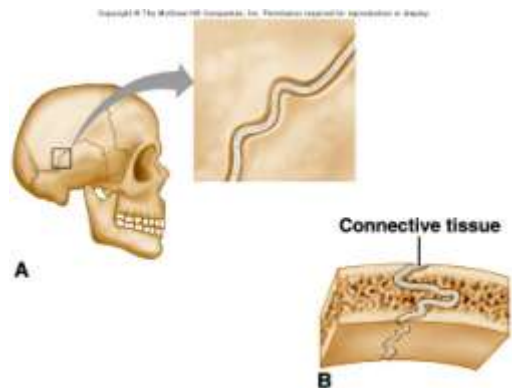
- Joints:
 - ▣ functional junctions between bones.
- Functions
 - ▣ Bind parts of the skeleton
 - ▣ Allow for bone growth
 - ▣ Allow a change of shape for childbirth
 - ▣ Enable the body to move in conjunction with muscle contractions

Naming Joints

- Usually derived from the names of the articulating bones.
 - ▣ Glenohumeral
 - ▣ Sternoclavicular
 - ▣ Acromioclavicular
 - ▣ Tibiofemoral

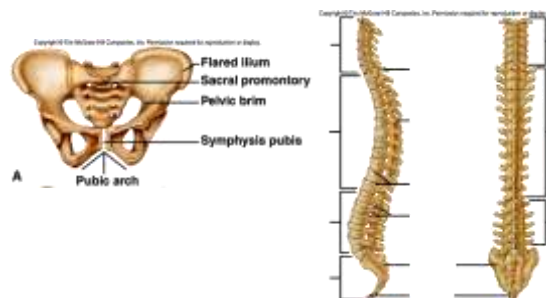
Types of Joints

- Fibrous (Synarthrotic) Joints:
 - ▣ Lie between bones that closely contact one another
 - ▣ Little or no movement takes place between the bones
 - ▣ Joined by a thin layer of dense connective tissue
 - ▣ Ex. Joint between sutures in the skull



Types of Joints

- Cartilaginous (amphiarthrotic) Joints:
 - ▣ Brought together by different types of cartilage
 - ▣ Allows limited movement
 - ▣ Ex. Between vertebrae, symphysis pubis



Types of Joints

- Synovial (Diarthrotic) Joints
 - ▣ Allow for free movement
 - ▣ Most joints of the body
 - ▣ The ends of the bones are covered by hyaline or articular cartilage.

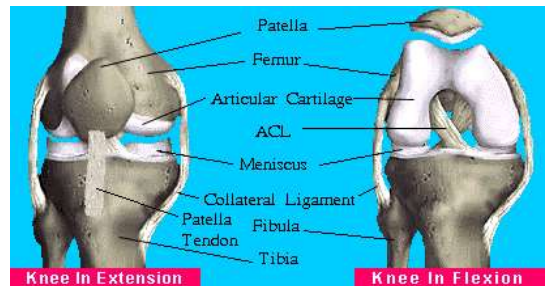
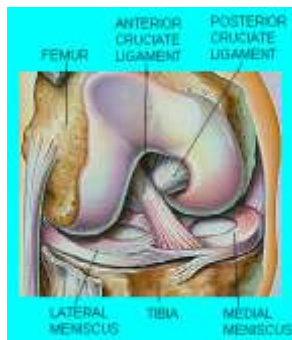
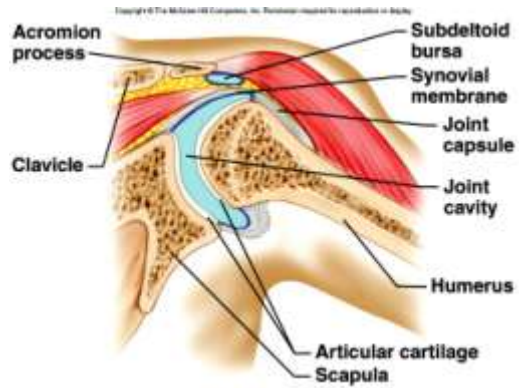
Synovial Joints

- The Anatomy
 - ▣ Articular cartilage
 - ▣ Fibrous articular capsule
 - synovial membrane: secretes synovial fluid
 - ▣ Joint cavity
 - Synovial fluid: lubrication
 - ▣ Reinforcing ligaments



Synovial Joints

- Types of Joints
 - ▣ Ball and Socket
 - ▣ Hinge
 - ▣ Pivot
 - ▣ Saddle
 - ▣ Plane
 - ▣ Condylloid



Knee Replacement Surgery



Hip Replacement Surgery



Joint Disorders

- Bursitis
 - ▣ Inflammation of bursae or synovial membrane
- Sprain
 - ▣ Ligaments or tendons are damaged by excessive stretching
 - ▣ Ligaments or tendons are torn away from bone
- Dislocation
 - ▣ Articulating bones become separated or misaligned

Arthritis

- "Joint inflammation"
- Osteoarthritis
 - ▣ "wear and tear"
 - ▣ Breakdown of articular cartilage
- Rheumatoid arthritis
 - ▣ Autoimmune disorder
 - ▣ May result in ankylosis (bone ends become fused)



- Gouty arthritis (Gout)
 - ▣ Uric acid is deposited in soft tissues of joints

