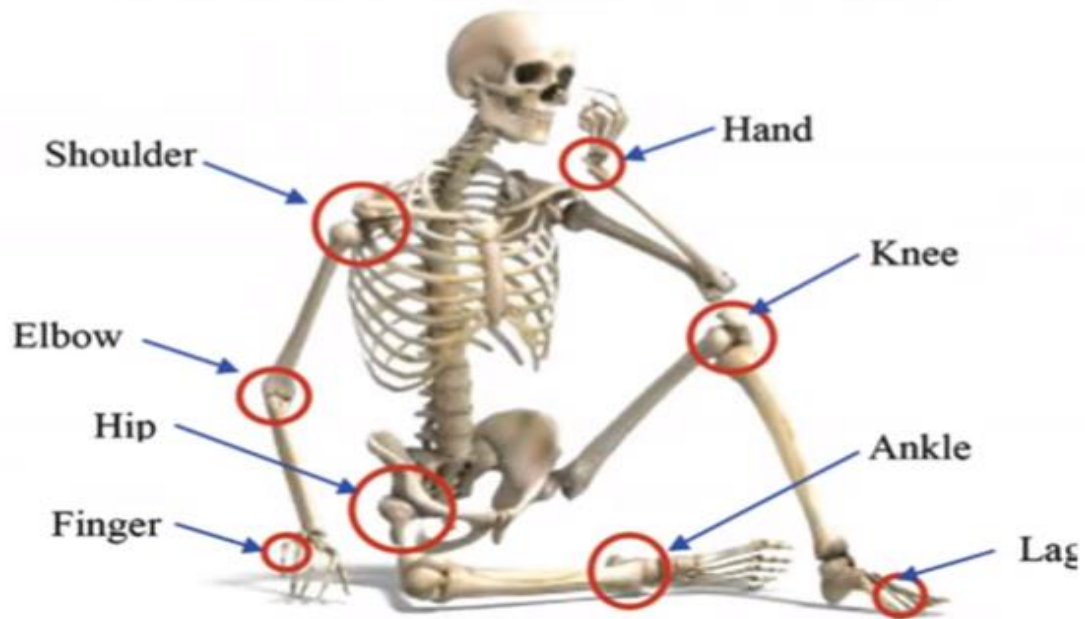


The point where two or more bones or cartilages meet/join together is called a JOINT.



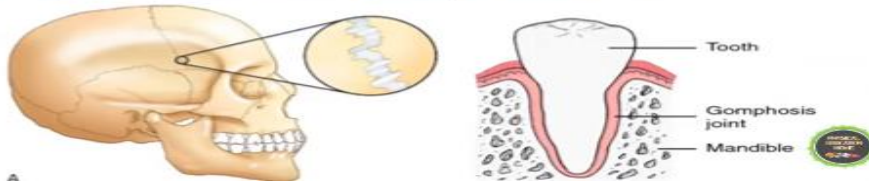
Joints are mainly classified on two basis - **STRUCTURE** and **FUNCTION** (mobility).

- (1) **Fibrous Joints**
- (2) **Cartilagenous Joints**
- (3) **Synovial Joints**

Fibrous Joints

(Synarthrosis / Immovable Joints)

- Completely immovable
- No cavity / gap between joints
- Binded with dense fibrous connective tissues
- Example : sutures, gomphosis, etc.



Cartilagenous Joints

(Amphiarthrosis / Slightly Movable Joints)

- Little bit movement is possible
- Minor pesence of cavity / gap between joints
- Binded with cartilages
- Example : vertebral column, rib cage, etc.



Synovial Joints

(Diarthrosis / Freely Movable Joints)

- Comparatively more cavity / space between joints
- Synovial Fluid is present between two joints
- Degree of Freedom is maximum
- Subdivided into **6** categories
 - (1) Hinge Joint
 - (2) Pivot Joint
 - (3) Ball and Socket Joint
 - (4) Saddle Joint
 - (5) Ellipsoid Joint / Condylloid Joint
 - (6) Plane Joint / Gliding Joint



Synovial Joints

(Diarthrosis / Freely Movable Joints)

(1) Hinge Joint

- It is a uniaxial joint
- Example : elbow joint, knee joint, finger joint
(interphalangeal joints)



Synovial Joints

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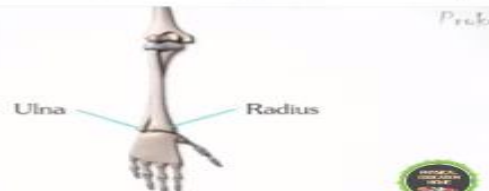


Synovial Joints

(Diarthrosis / Freely Movable Joints)

(2) Pivot Joint

- allows Rotating motion
- Example : neck joint (between top 2 cervical bones), radio-ulnar joint (forearm)

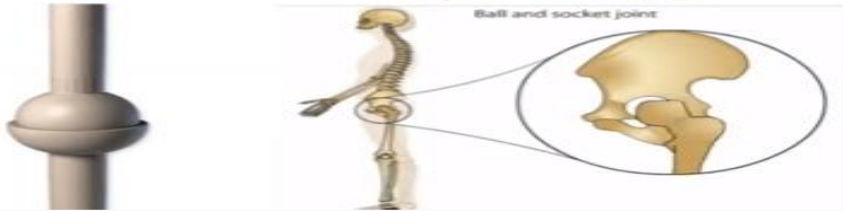


Synovial Joints

(Diarthrosis / Freely Movable Joints)

(3) Ball and Socket Joint

- allows Maximum freedom
- it is a Multi-Axial joint
- Example : shoulder joint, hip joint



Synovial Joints

(Diarthrosis / Freely Movable Joints)

(4) Saddle Joint

- joint between Concave and Convex bones
- Example : Thumb (joint between carpal and metacarpel bone)
- It is biaxial joint

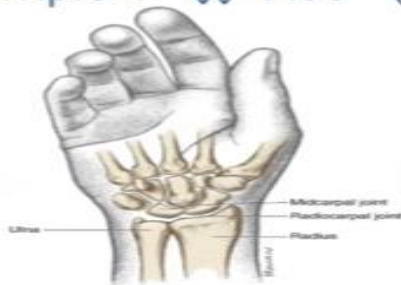


Synovial Joints

(Diarthrosis / Freely Movable Joints)

(5) Ellipsoid/Condylloid Joint

- It is biaxial joint
- Example : Wrist (radio-carpel joint)



Synovial Joints

(Diarthrosis / Freely Movable Joints)

(6) Plane/Gliding Joint

- surface is plane at the bone ends
- Example : Wrist and Ankle (joints intercarpal and intertarsal)

