

Synovial Joints

- Types of synovial joints based on **shape**:
 - **Plane joint**
 - **Hinge joint**
 - **Pivot joint**
 - **Condylar joint**
 - **Saddle joint**
 - **Ball-and-socket joint**

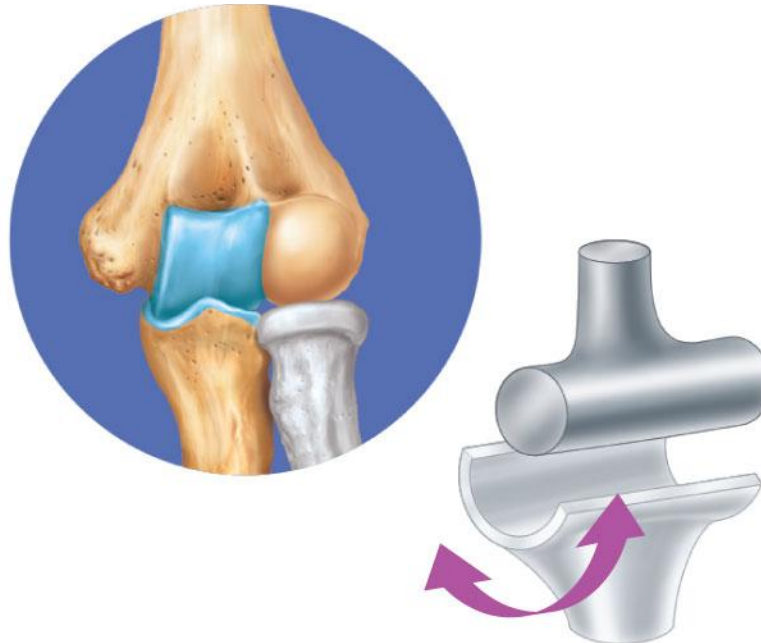
Plane Joint

- Articulating surfaces are essentially **flat**
- Only **short, gliding movements** allowed
- Example: **Intercarpal joints**



Hinge Joint

- **Cylindrical end** of one bone fits a **trough-shaped surface** of another bone
- **Angular movement in one plane** (like a door hinge)
- Example: **Elbow joint**



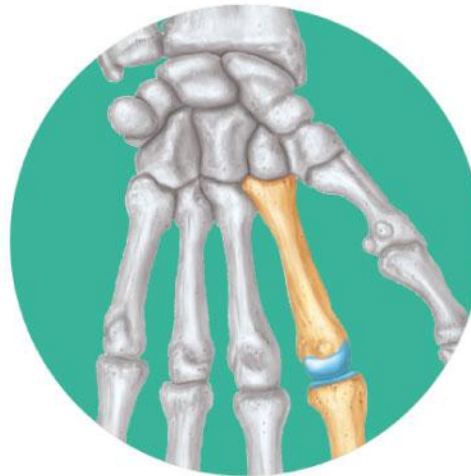
Pivot Joint

- **Rounded end** of one bone fits into a **sleeve or ring of bone**
- Rotating bone **turns around its long axis**
- Example: **Proximal joint between radius and ulna**



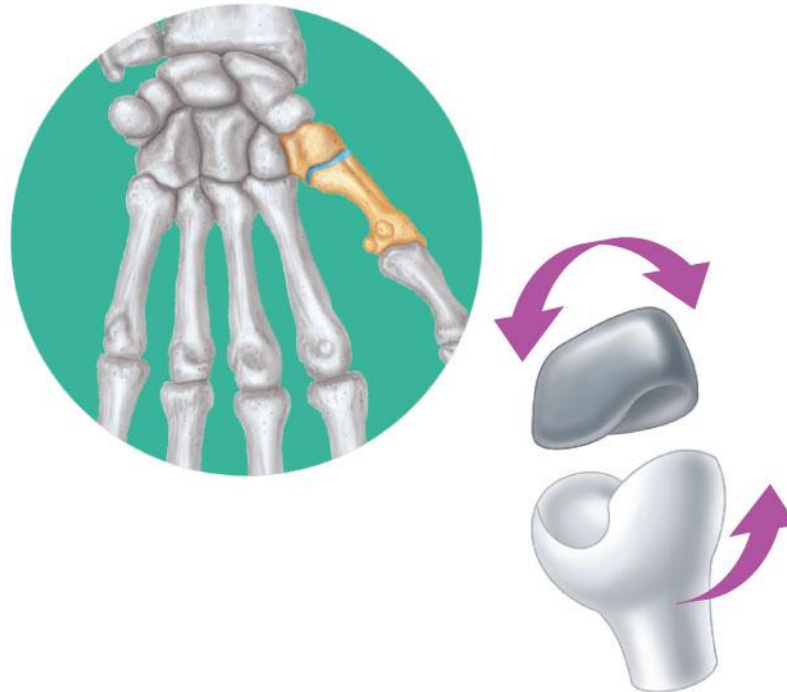
Condylar Joint

- **Egg-shaped surface** of one bone fits into **oval concavity** of another
- Bone moves from **side to side, back and forth**
- Example: **Knuckles of phalanges**



Saddle Joint

- Surface of each bone has **both convex and concave surfaces** (like saddle for a horse)
- Bone moves from **side to side, back and forth**
- Example: **Thumb joint**



Ball-and-Socket Joint

- **Spherical end of one bone fits into round-socket in another**
- **Allow movement in all axes, including rotation**
- **Example: Shoulder, hip**

