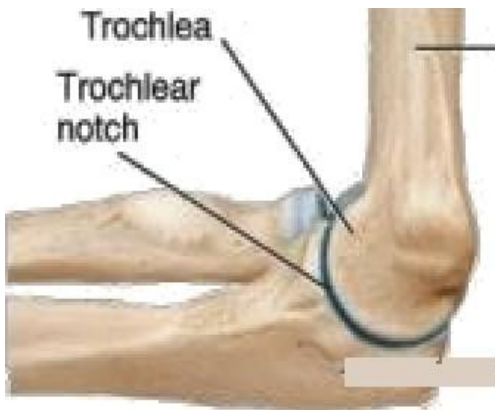


SYNOVIAL JOINT



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Types of Synovial Joints

- There are **6 types of synovial joints** based on the shapes of the articulating bone surfaces.
 - Not all synovial joints have all (or any) accessory structures like ligaments and bursae —some of them are quite simple.

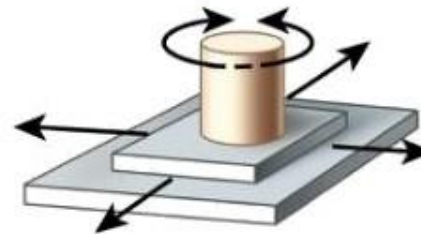
Types of Synovial Joints

- In a **planar** joint, the articulating surface is flat or slightly curved, permitting back and forth and side-to-side movements



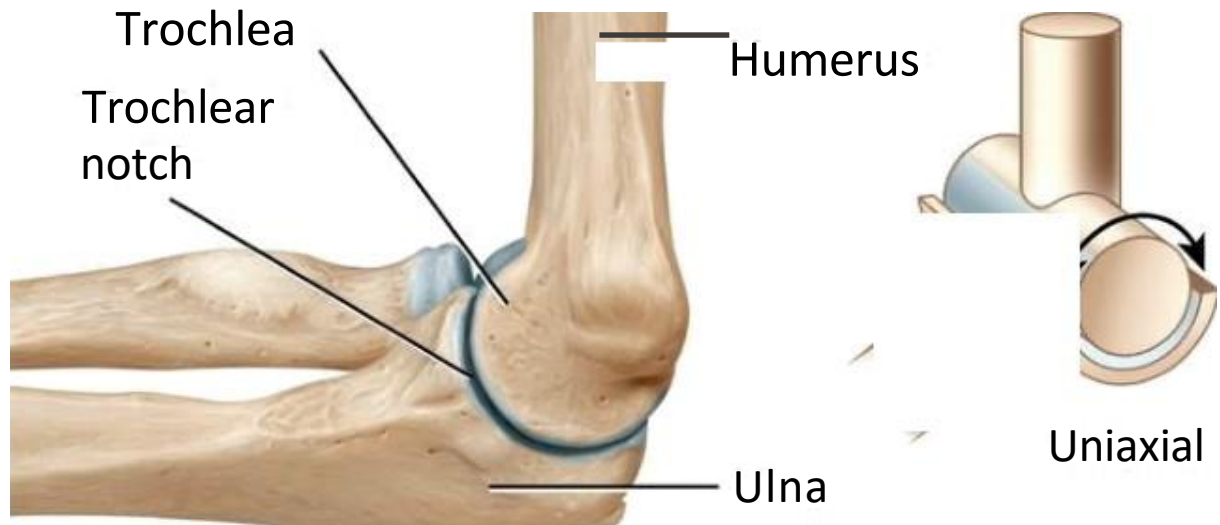
Navicular
Second
cuneiform
Third
Cuneiform

Plane joint between navicular and second and third cuneiforms of tarsus in foot



Types of Synovial Joints

- In a **hinge** joint, the convex surface of one bone fits into the concave surface of another, producing an opening and closing action like a hinge.



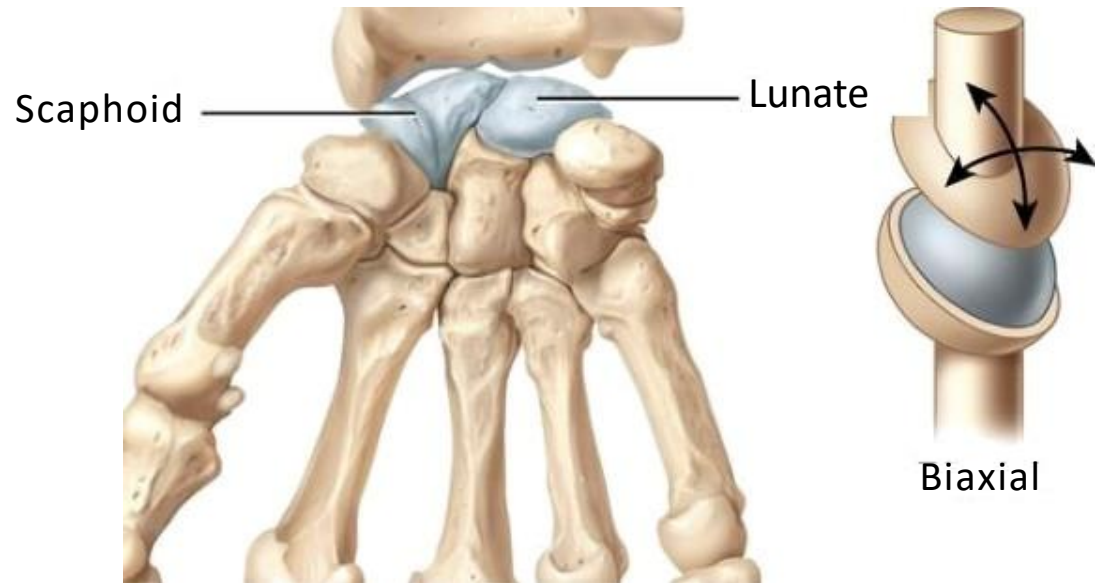
(b) Hinge joint between trochlea of humerus and trochlear notch of ulna at the elbow

Types of Synovial Joints

- In a **pivot** joint, the rounded surface of one bone articulates with a ring structure formed by another bone and a ligament (allowing rotation around its longitudinal axis).

Types of Synovial Joints

- In a **condyloid** joint, the convex oval-shaped projection of one bone fits into the oval-shaped depression of another bone

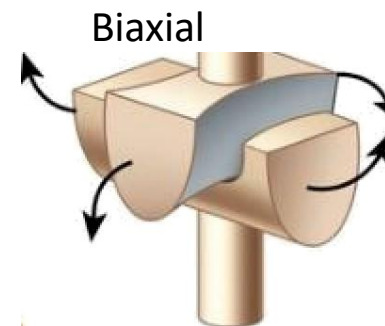
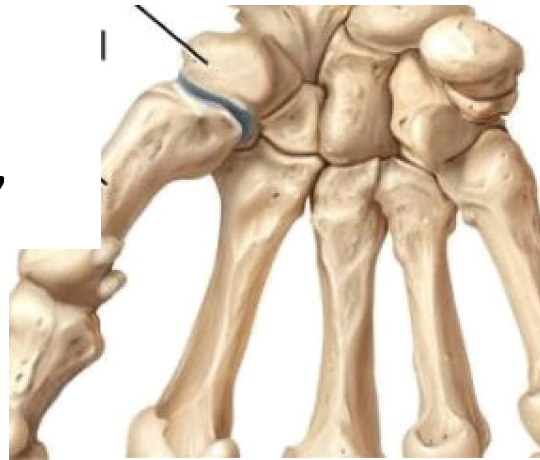


(d) Condyloid joint between radius and scaphoid and lunate bones of carpus (wrist)

Types of Synovial Joints

- In a **saddle** joint, the articular surface of one bone is saddle-shaped. This is really a modified condyloid joint, but the range of motion is

expanded to include ,
movement around
All 3 axes.



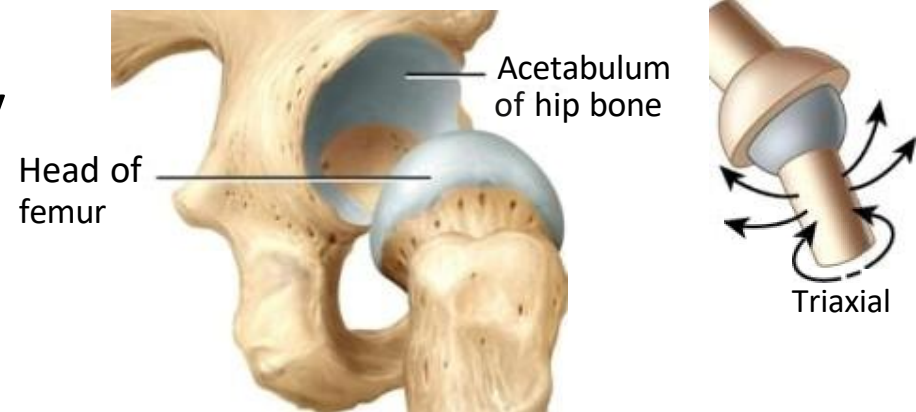
(e) Saddle joint between trapezium of carpus (wrist) and metacarpal of thumb

Types of Synovial Joints

- In a **ball-and-socket** joint, the ball surface of one bone fits into a cuplike depression of another bone.
- These joints allow the most movement of any joint.

Types of Synovial Joints

—The shoulder joint is a ball-and-socket synovial joint —it has the most range of motion of any joint in the body.



(f) Ball-and-socket joint between head of femur and acetabulum of hip bone