

Overview Of Joint Movements



Joints Are Articulations

- One bone articulating with another
- Not all joints are created equally
- Three major categories
- Fibrous, Cartilaginous, and Synovial
- examples

Fibrous Joints

- Examples are synarthroses or joints that do not move
- United by dense, fibrous connective tissue
- E.g., sutures of the skull

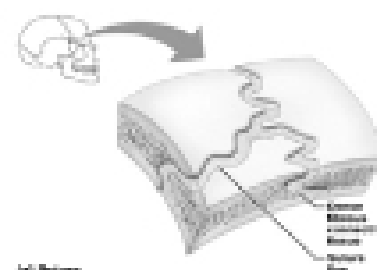
Cartilaginous Joints

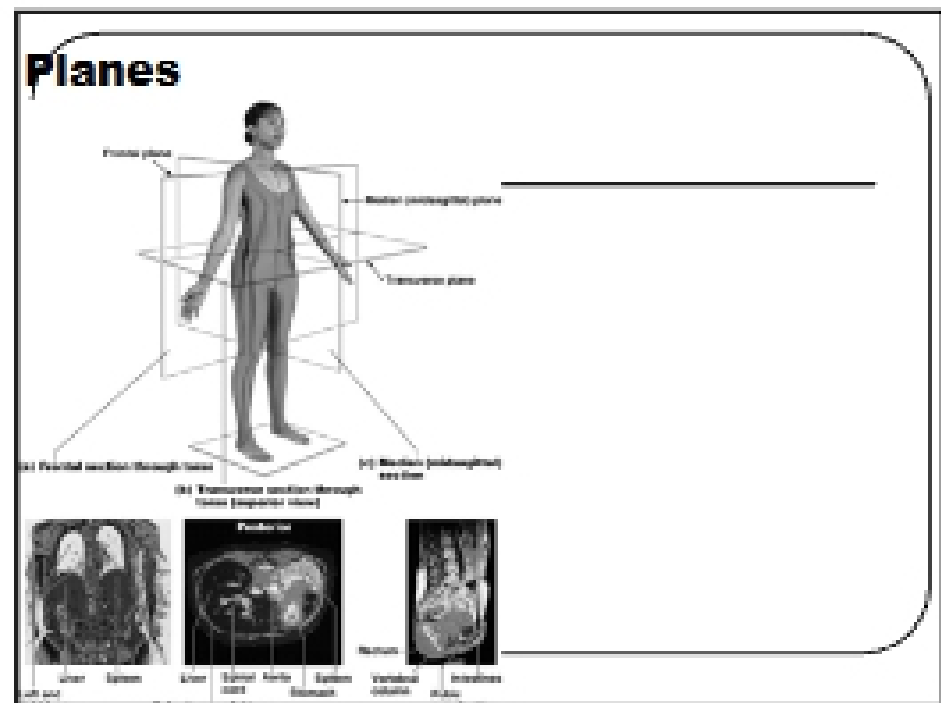
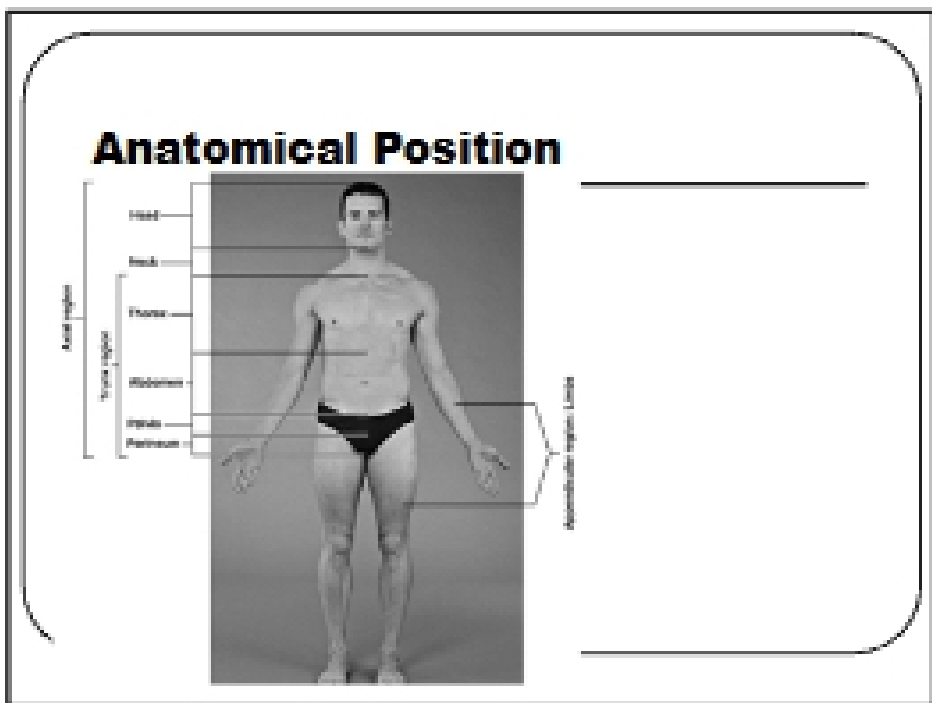
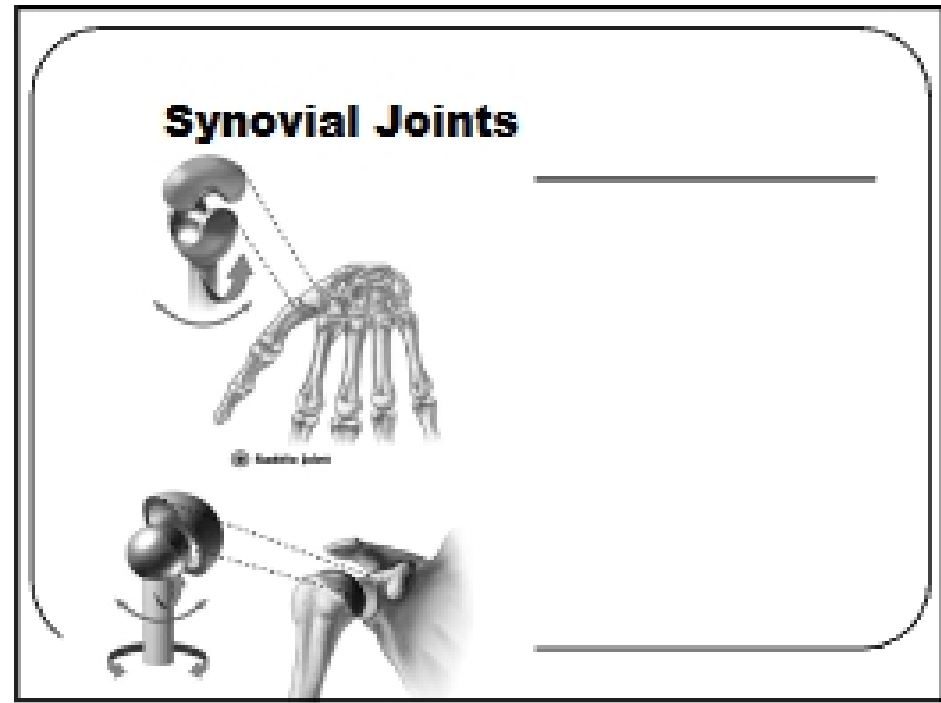
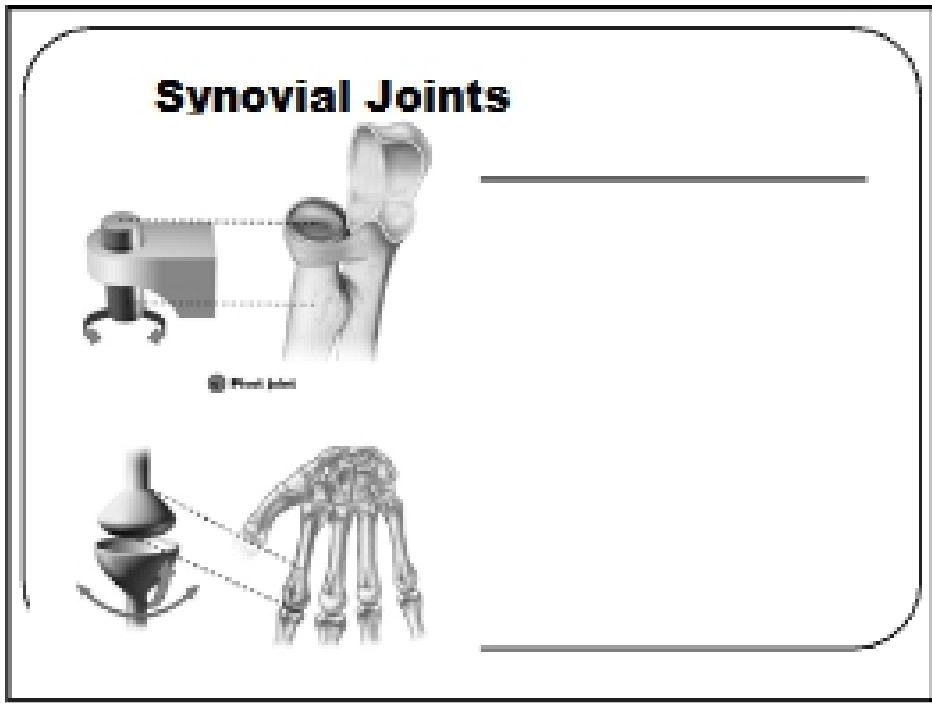
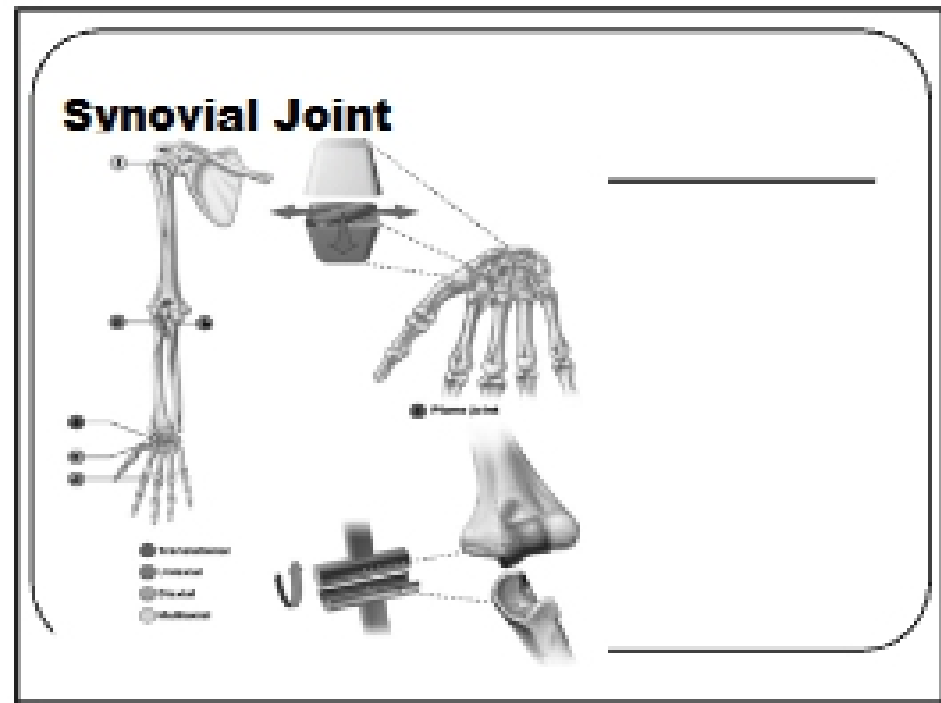
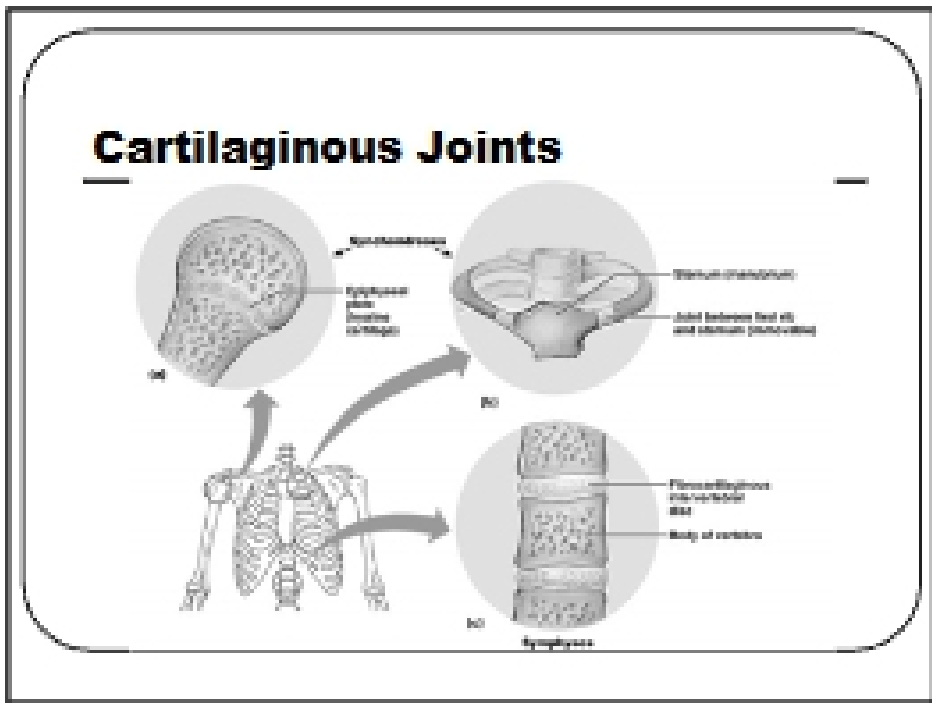
- Amphiarthroses, joints that move slightly
- Characterized by no joint capsule
- Held together by cartilage
- Generally contain a fibrocartilaginous disc
- Motion limited
- E.G., intervertebral discs
- Pubic symphysis

Synovial Joints

- Freely Moveable
- Motion dictated by the shape of the bones in the joint and by supporting soft tissue, e.g., muscle attachments and joint capsules (ligaments)
- Movements are described traditionally by the actual direction the bones move, called Osteokinematic Motion and the axis about which they move

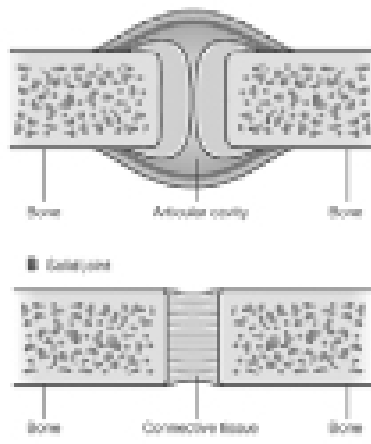
Fibrous Joints



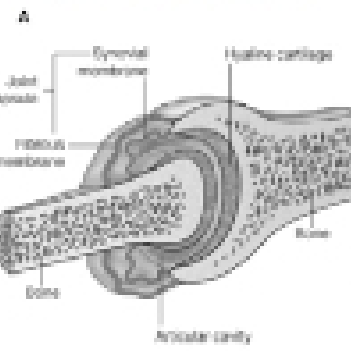


Synovial Joints

A Synovial joint

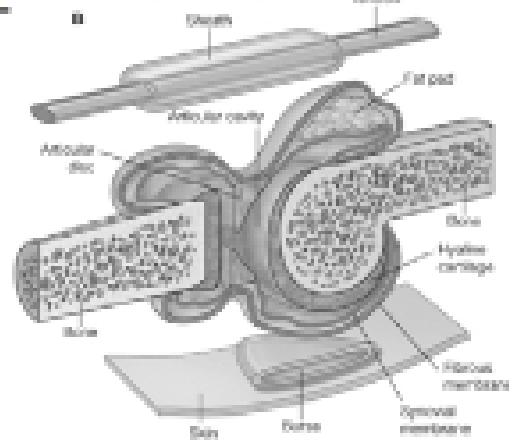


Synovial Joints



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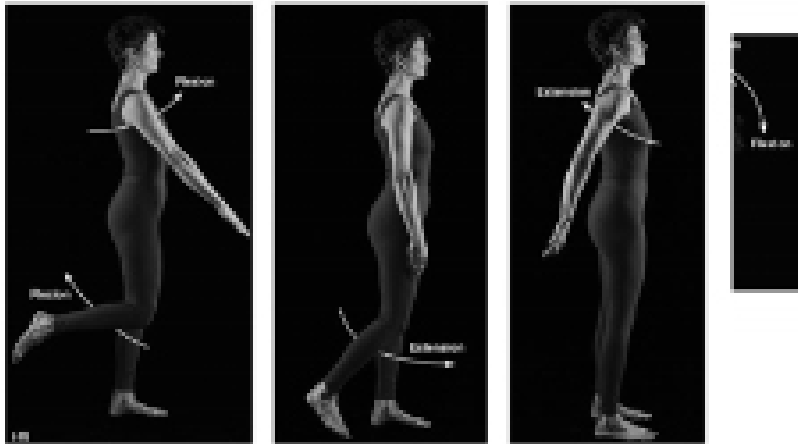
Synovial Joints



Synovial Joints

- Flexion/Extension = movement in the sagittal plane about a frontal axis
- Abduction/Adduction = movement in the frontal plane about a sagittal (A-P) axis
- Internal/External Rotation = movement in the transverse plane about a longitudinal axis
- Out of True Plane

Movements



Movements

