

FEATURES OF MAJOR JOINTS

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http://Biology.clc.uc.edu/Fankhauser/Labs/Anatomy_&_Physiology/A&P201/Skeletal/Joints.htm

Examine the models provided and identify the following features of these joints. Articulated joints will be brought in from a local butcher, and you should identify these features on them and illustrate the specimen. Note that wordstems will help you tremendously in locating and understanding the connections these features make.

SYNOVIAL JOINT FEATURES:

These are common to all synovial joints: (Martini's 7th, p 261)

synovial capsule	collagenous structure, encloses, supports and protects joint
synovial membrane	inner lining of capsule, secretes synovial fluid
articular cartilage	hyaline cartilage padding on articulating surface of joined bones
synovial fluid	lubricating, nourishing fluid rich in mucopolysaccharide. Contained within capsule

Illustrate each joint from the perspective specified, **label features you can see:**

SHOULDER (glenohumeral): (lateral view)

(Martini's 7th, p 272)

clavicle, scapula, humerus

glenohumeral ligament (not on model)

coracohumeral ligament (not on model)

glenoid labrum (hidden on model)

transverse humeral ligament

tendon of long head biceps brachii

tendon sheath

musculotendinous cuff (not on model)

KNEE JOINT: (lateral view with lateral

collateral ligament removed)

(Martini's 7th, pp 277)

femur, patella, tibia, fibula

lateral collateral ligament

[medial collateral ligament obscured]

anterior cruciate ligament

posterior cruciate ligament

popliteal ligaments

patellar ligament

lateral meniscus

[medial meniscus obscured]

FLEXED ELBOW: (superior, anterior view)

(Martini's 7th, p 273)

humerus, ulna, radius

radial (or lateral) collateral ligament

lateral epicondyle

annular ligament and radial notch

ulnar (or medial) collateral ligament

medial epicondyle

coronoid process

tendon of triceps

(not on model, inserts in olecranon process)

HIP JOINT: (Martini's 7th, p 274)

two views, anterior and posterior:

capsule strengthened by these ligaments:

anteriorly:

iliofemoral

pubocapsular (or pubofemoral)

posteriorly:

ischiofemoral (or ischiofemoral)

ligamentum teres

ties femur to os coxa

acetabular labrum

lip of cartilage