

Joints

1. Compare the locations and names of the cruciate ligaments and the collateral ligaments.
2. Compare the locations and names of the fluid-filled sacs that reduce friction.
3. Compare the structure of menisci and articular cartilage.
4. Describe the pathology of Rheumatoid Arthritis.

Answers:

Joints

1. Compare the locations and names of the cruciate ligaments and the collateral ligaments.
 - **ACL (anterior cruciate ligament) and PCL (posterior cruciate ligament) connect the femur and tibia together; they are found within the joint capsule and between the bones.**
 - **A new ligament has been discovered! It is the ALL (Anteriolateral ligament) and is right next to the ACL. When people tear their ACL, they probably tear their ALL too, which may explain some of the varying outcomes from surgery to repair the ACL. If the ALL is torn too, then problems may persist despite the ACL being repaired.**
 - **The medial and lateral collateral ligaments connect the femur and tibia/fibula, too, but they are outside the joint capsule and connect along the outsides of the bones.**
2. Compare the locations and names of the fluid-filled sacs that reduce friction.
 - **Synovial Sac: within the joint capsule**
 - **Bursa: under tendons and muscles**
 - **Tendon Sheath: a specialized bursa that looks like a hot dog bun; a tendon sits within it**
3. Compare the structure of menisci and articular cartilage.
 - Meniscus/menisci: fibrocartilage connective tissue**
 - articular cartilage: hyaline cartilage connective tissue**
4. Describe the pathology of Rheumatoid Arthritis.
 - Antibodies made by the host attack the synovial membrane. Over time, this can cause the irritated joints to grow bigger in an attempt to reduce the friction (this decompensatory method is not helpful).**