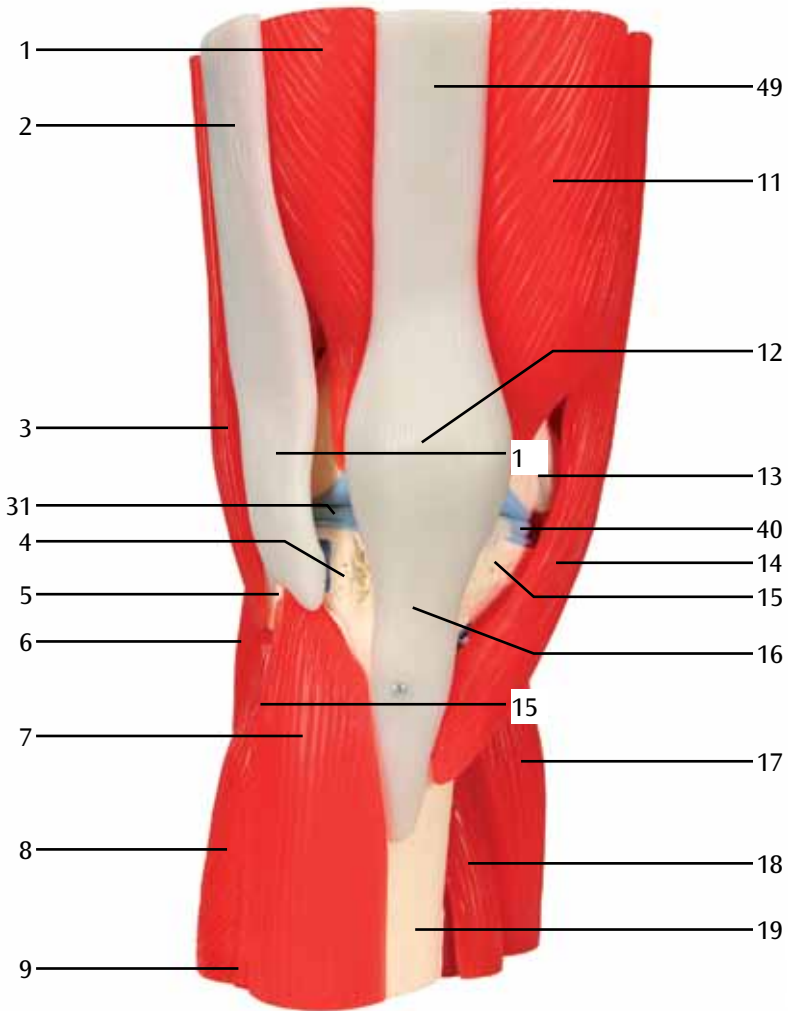


Knee Joint, 12-Part

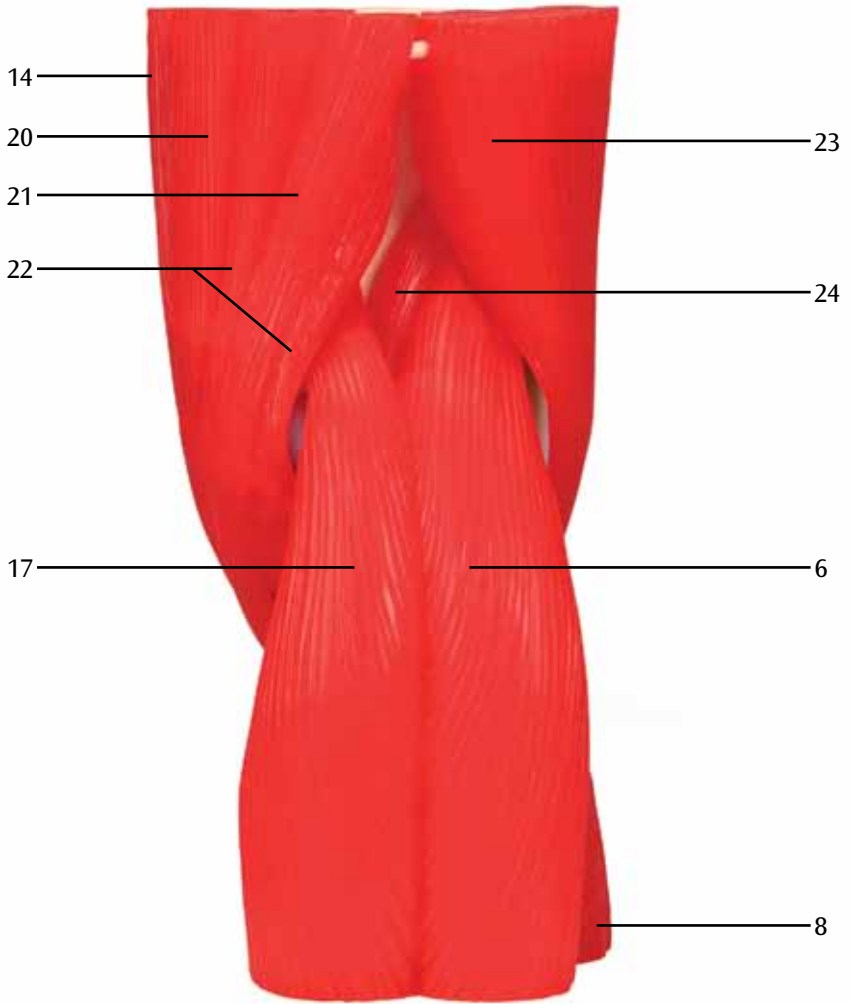
English

The knee joint is the largest joint in the human body. It is formed by the femur, tibia and patella. The patella is secured by the insertion tendon of the quadriceps muscle. The joint is stabilized by the anterior and posterior cruciate ligaments, the lateral collateral ligament and the medial collateral ligament, as well as the tendons of the thigh musculature. Besides flexion and extension, medial and lateral rotation are possible while the knee is bent. Thereby the anterior femoral muscles affect extension and the posterior muscles affect flexion. The medial flexors attaching to the tibia rotate the lower leg medially, the ones attaching laterally rotate it laterally. Rolling and sliding movements take place between the joint surfaces of the femur and tibia. Moveable tapered half-round cartilage disks (menisci) thereby balance the unevenness between the joint surfaces and increase the load-transferring contact surface. The medial meniscus adheres to the tendon that attaches the femur to the tibia outside of the articulation capsule. The lateral collateral ligament lies external to the articulation capsule and attaches the femur to the head of the fibula. Medial collateral- and lateral collateral ligaments prevent lateral movement of the lower leg. The cruciate ligaments are located in the interior of the articulation capsule. The anterior cruciate ligament runs from the lateral condyle of the femur to an anterior insertion surface between the condyles of the tibia. Conversely, the posterior cruciate ligament runs from the medial condyle of the femur to a posterior insertion surface between the condyles of the tibia. The cruciate ligaments hold the joint together and prevent the condyles of the femur from slipping off of the tibial plateau.

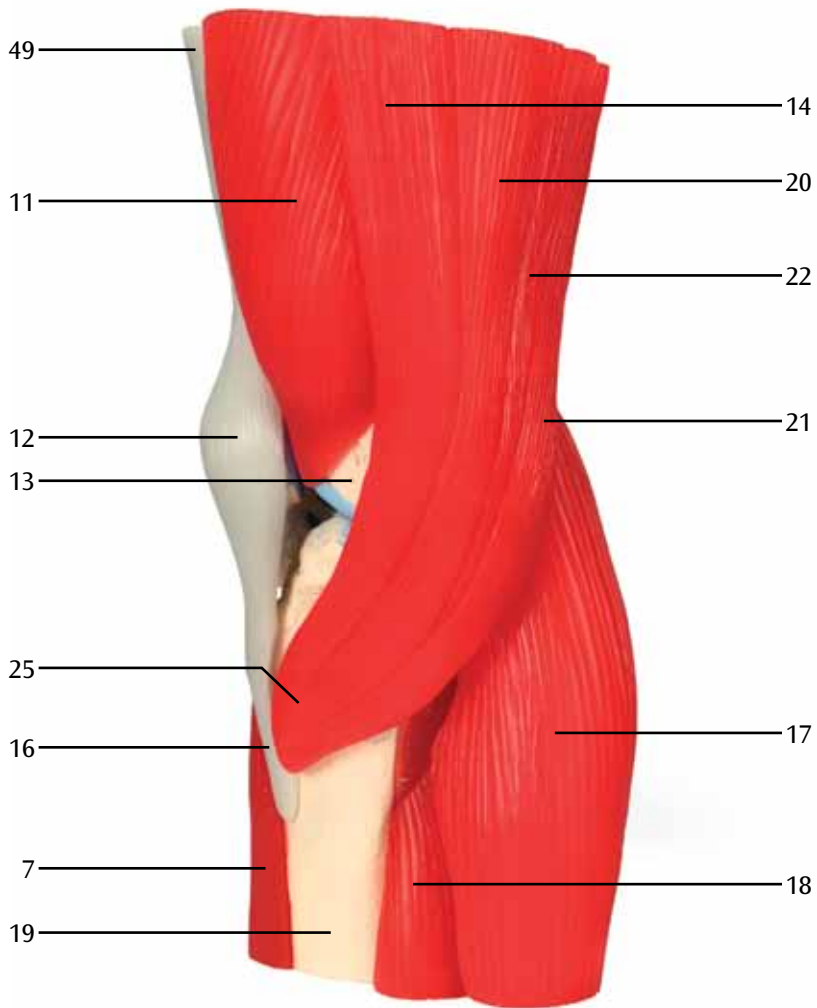
- 1 Vastus lateralis muscle
- 2 Iliotibial tract
- 3 Biceps femoris muscle
- 4 Tibia, lateral condyle
- 5 Fibular head
- 6 Gastrocnemius, lateral head
- 7 Tibialis anterior muscle
- 8 Fibularis longus muscle
- 9 Extensor digitorum longus
- 10 Quadriceps femoris muscle, tendon
- 11 Vastus medialis muscle
- 12 Patella
- 13 Femur, medial condyle
- 14 Sartorius muscle
- 15 Tibia, medial condyle
- 16 Patellar ligament
- 17 Gastrocnemius, medial head
- 18 Soleus muscle
- 19 Tibia, medial surface
- 20 Gracilis muscle
- 21 Semitendinosus muscle
- 22 Semimembranosus muscle
- 23 Biceps femoris muscle
- 24 Plantaris muscle
- 25 Pes anserinus (insertion together with the sartorius muscle, the gracilis muscle and the semitendinosus muscle)
- 26 Biceps femoris muscle, long head
- 27 Biceps femoris muscle, short head
- 28 Femur, lateral condyle
- 29 Popliteus muscle
- 30 Lateral ligament
- 31 Lateral meniscus
- 32 Anterior ligament of the fibular head
- 33 Fibula
- 34 Interosseus membrane of the lower leg
- 35 Articular muscle of the knee
- 36 Femur
- 37 Adductor magnus muscle
- 38 Articular surface of the patella
- 39 Anterior cruciate ligament
- 40 Medial meniscus
- 41 Collateral ligament
- 42 Tibial tuberosity (insertion of the tendons of the tibia)
- 43 Quadriceps femoris muscle
- 44 Tibia
- 45 Posterior cruciate ligament
- 46 Tibialis posterior muscle
- 47 Flexor digitorum longus muscle
- 48 Popliteus surfaces of the femur
- 49 Rectus femoris muscle, tendon
- 50 Transverse ligament of the knee (between the medial and lateral meniscus)
- 51 Posterior menisiofemoral ligament [Wrisberg ligament]



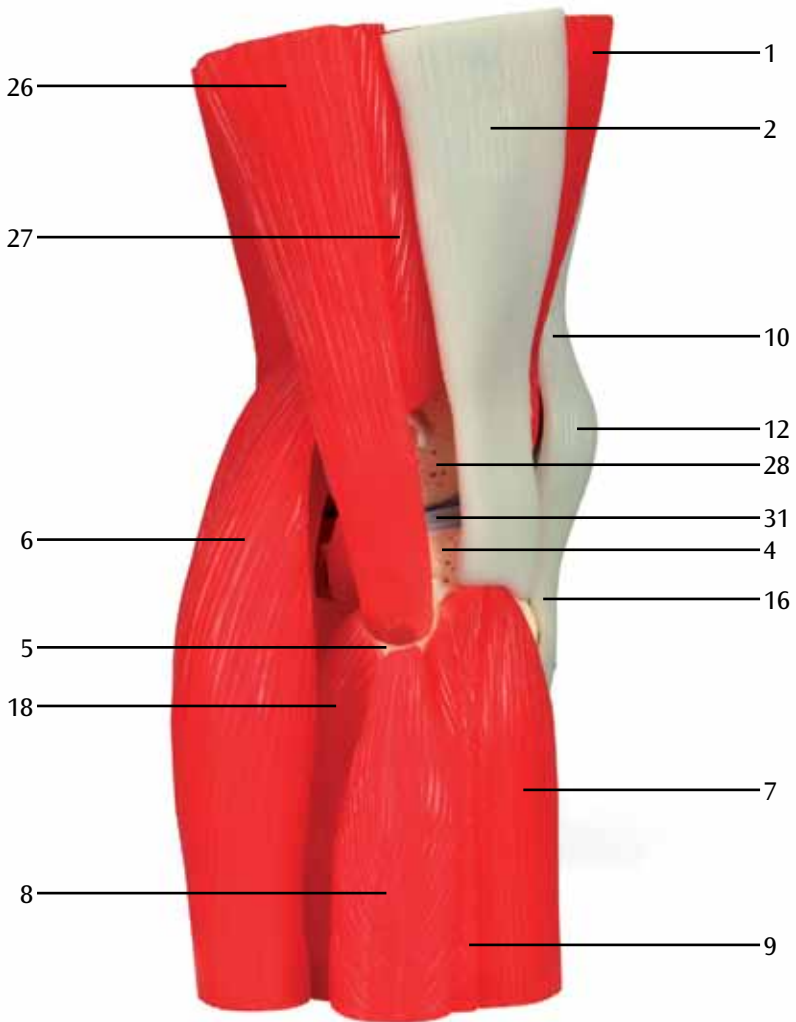
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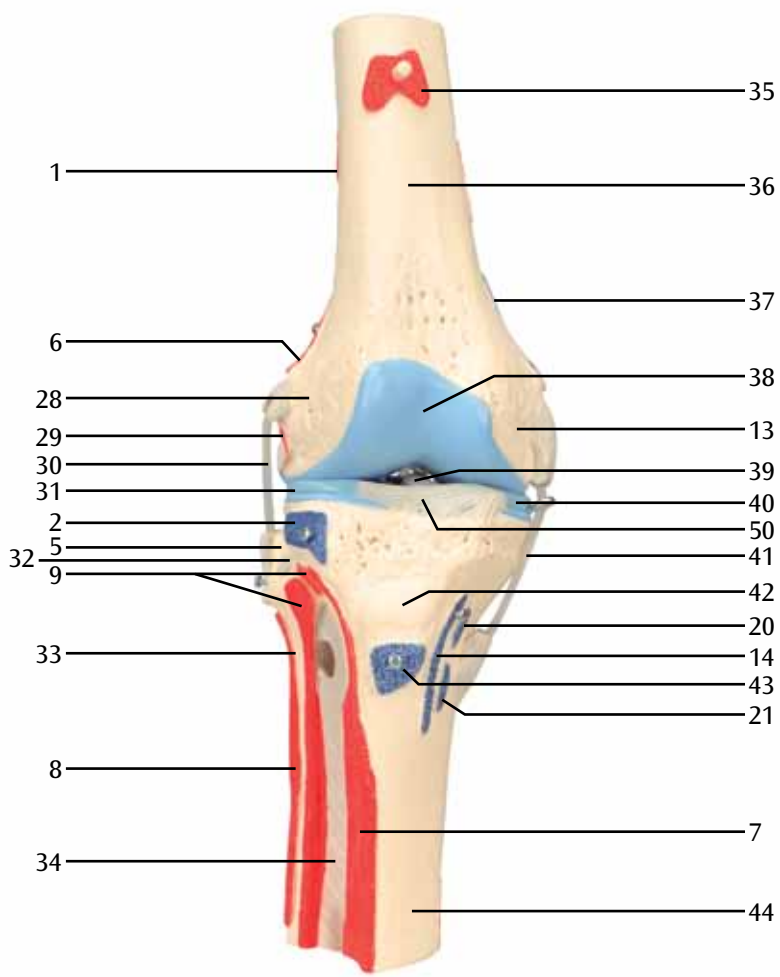
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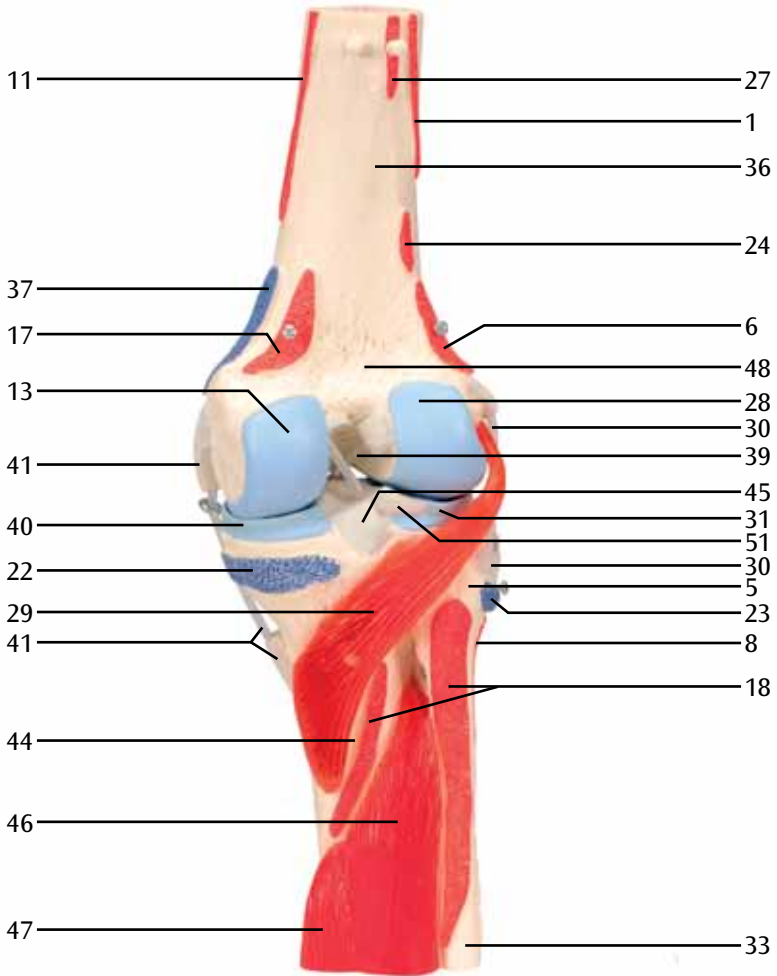
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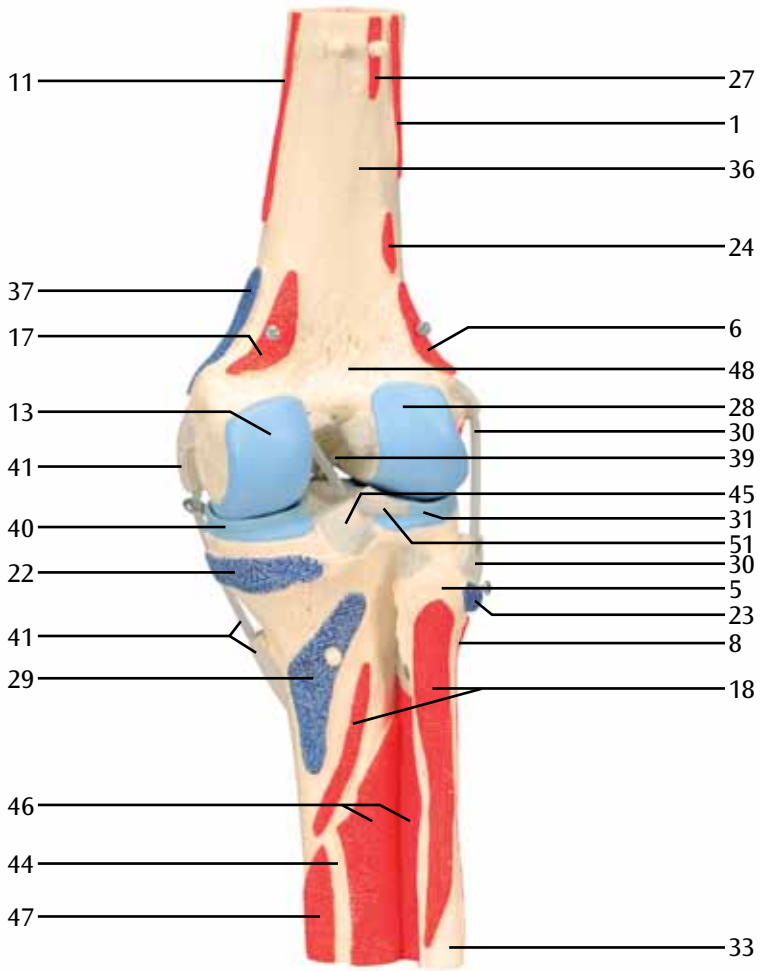
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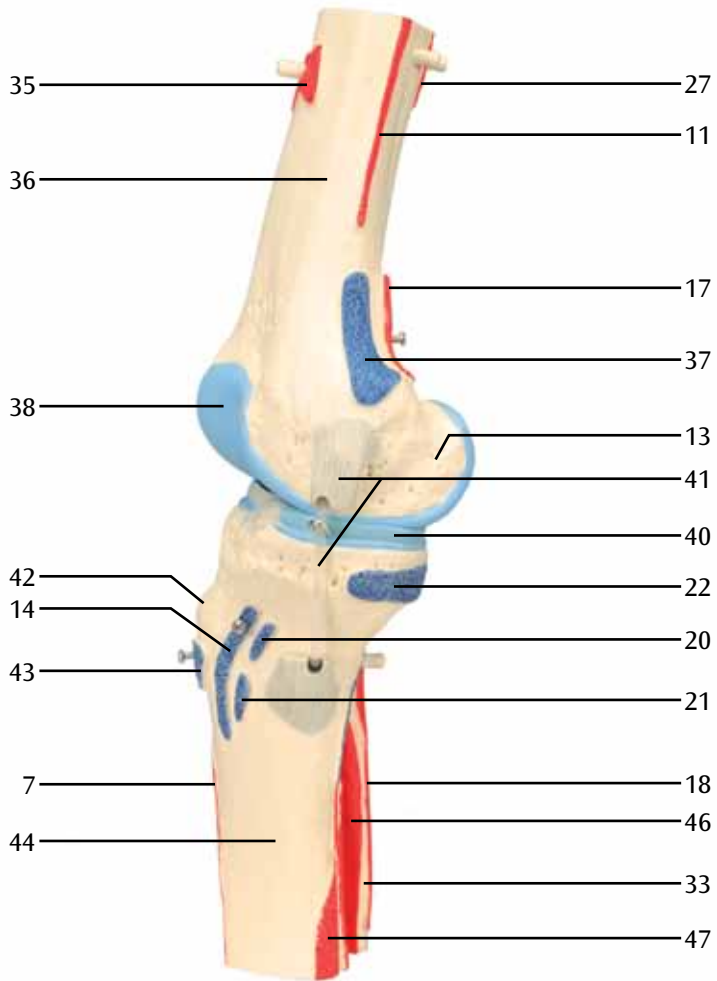
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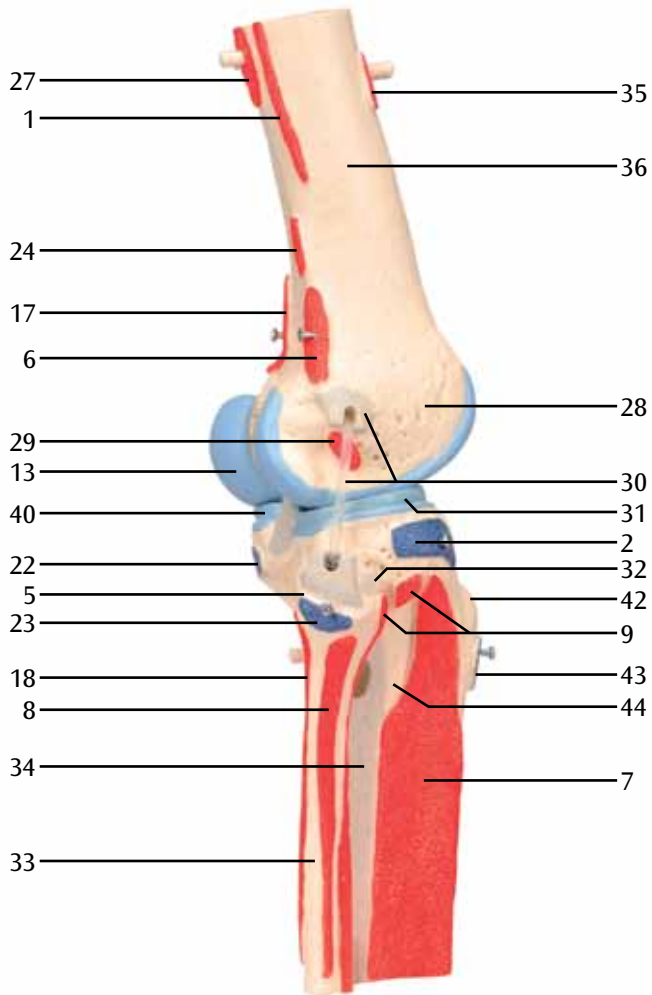
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