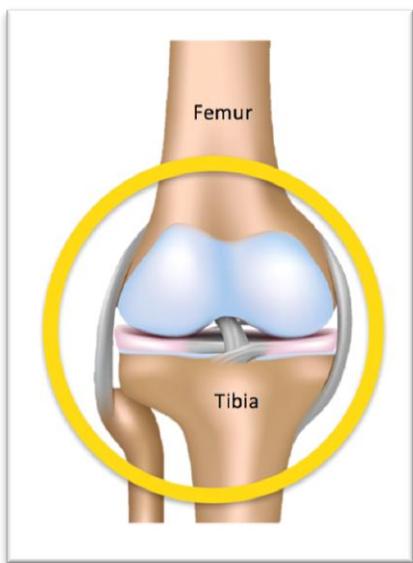


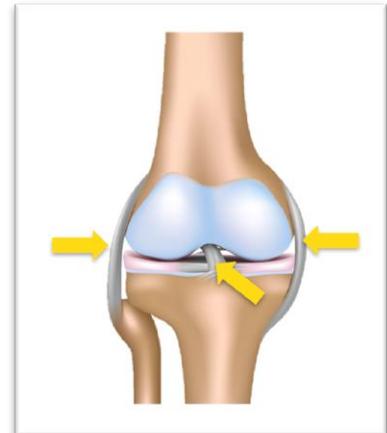
The Knee Joint – Anatomy

Die Knie Gewrig – Anatomie

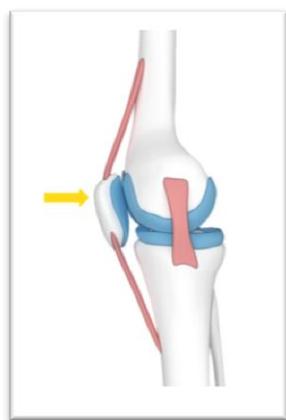


The knee joint is referred to as a hinge joint and consists of two bones, the thigh bone (**Femur**) and the shin bone (**Tibia**), held together by ligaments.

‘n Knie gewrig is ‘n skanier wat gevorm word waar twee bene bymekaar kom, die bo-been (**Femur**) en die onder-been (**Tibia**). Die twee bene word aan mekaar vas gehou deur die ligament.



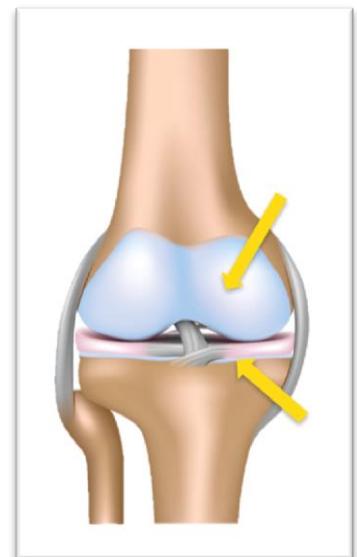
The knee cap (**Patella**) glides over the lower (distal) end of the femur when the knee bends. The Quadriceps muscle is attached to the upper end (proximal end) of the Patella, on the lower end (distal end) of the Patella, the Patella tendon is attached. The Quadriceps muscle action is to straighten (extend) and to lock the knee.

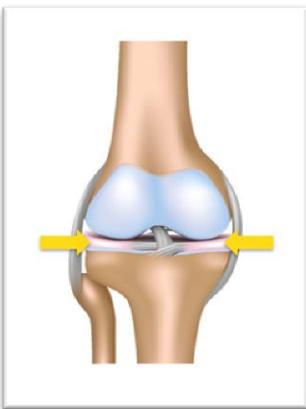


Aan die bokant (proksimaal) van die knieskyf (**Patella**) heg die bo-been spier (Quadriceps) vas en aan die onderkant (distal) heg die knieskyf pees (Patella Tendon) vas. Die knieskyf gly oor die distale gedeelte van die bo-been wanneer die knie buig. Die bo-been spier help om die knie gewrig reguit te maak (te ekstendeer) en te sluit wanneer jy staan.

In a normal knee, the parts which are moving (**articulating**) with one another are covered with a smooth white layer called **cartilage** - which allows almost frictionless movement. Cartilage has no nerves , therefor the movement is smooth and painless.

In ‘n normale knie word altwee die been eindes bedek deur ‘n laag kraak-been. Kraak-been is baie glad en ook sagter as gewone been. Die kraak-been laat die twee bene oor mekaar gely en beweeg sonder enige wrywing. Omdat daar geen senuwee eindpunte in kraak-been is nie, is die beweging pynvry.





The **Meniscus** is situated between the two bones, which acts as the shock absorber when weight is applied to the knee. The spongy effect of the meniscus protects the cartilage from being compacted.

Die Meniskus word tussen die twee been eindes aangetref. Die funksie van die meniskus is om as skokabsorbeerder op te tree wanneer gewig op die knie gesit word. Die sponsirige effek beskerm die kraak-been teen verhoogde druk.

The joint is also enclosed by fibrous tissue, enveloping the joint –“capsule”, called synovium.

The synovium produces a fluid which reduces friction and decreases the wear and tear in the joint.

Die knie gewrig word omhul deur bind-weefsel (fibrose weefsel), wat die gewrig omvou om 'n geslotte sisteem te vorm. Dit staan bekend as die sinovium. Die sinovium produseer 'n vloeistof wat die weerstand en wrywing van die alledaagse gebruik verminder om die knie gewrig teen degenerasie te beskerm.

