

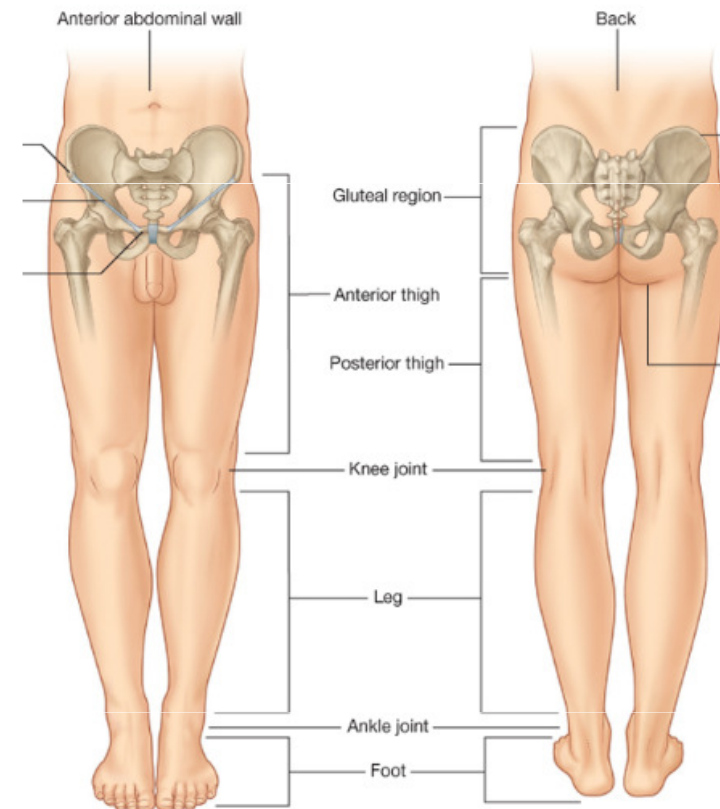


The Lower Limb

The Lower Limb

Consists of;

- the gluteal region (buttocks)
- the thigh
- the leg, and
- the foot.



Drake: Gray's Anatomy for Students, 2nd Edition.
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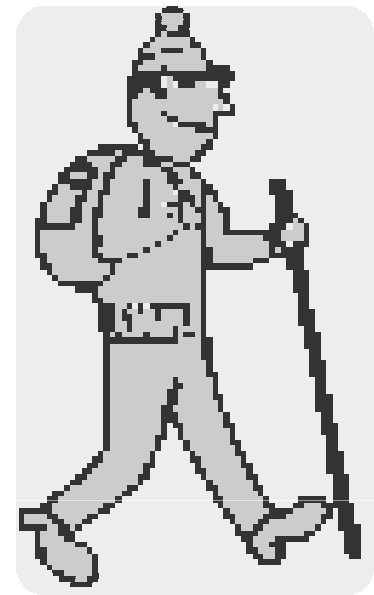
Functions of the Lower Limb

Support the body weight

The ligaments at the hip and knee joints facilitate locking of these joints therefore reducing the amount of muscular energy required to maintain a standing position.

Locomotion

To move the body through space. This involves integration of movements at all joints of the lower limb to place the foot on the ground and move the body over it.



Bones

Hip bone

- pelvis

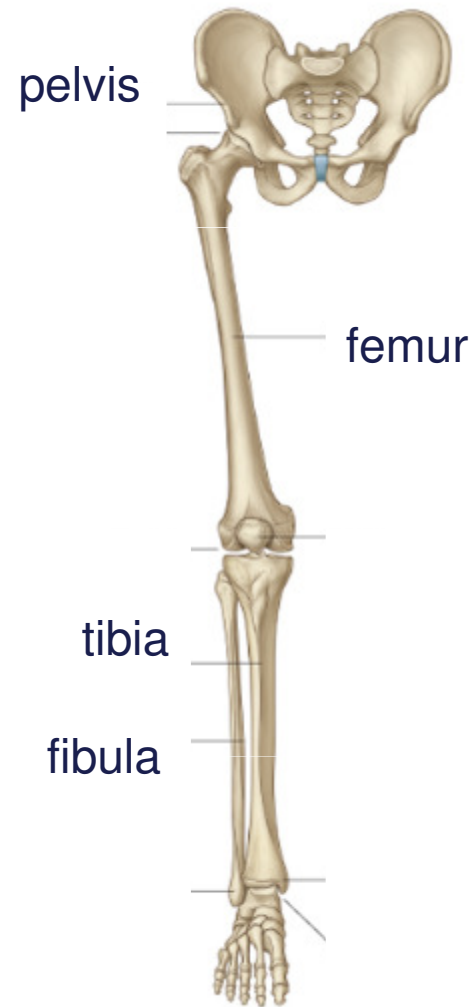
Thigh bone

- femur

Leg bones

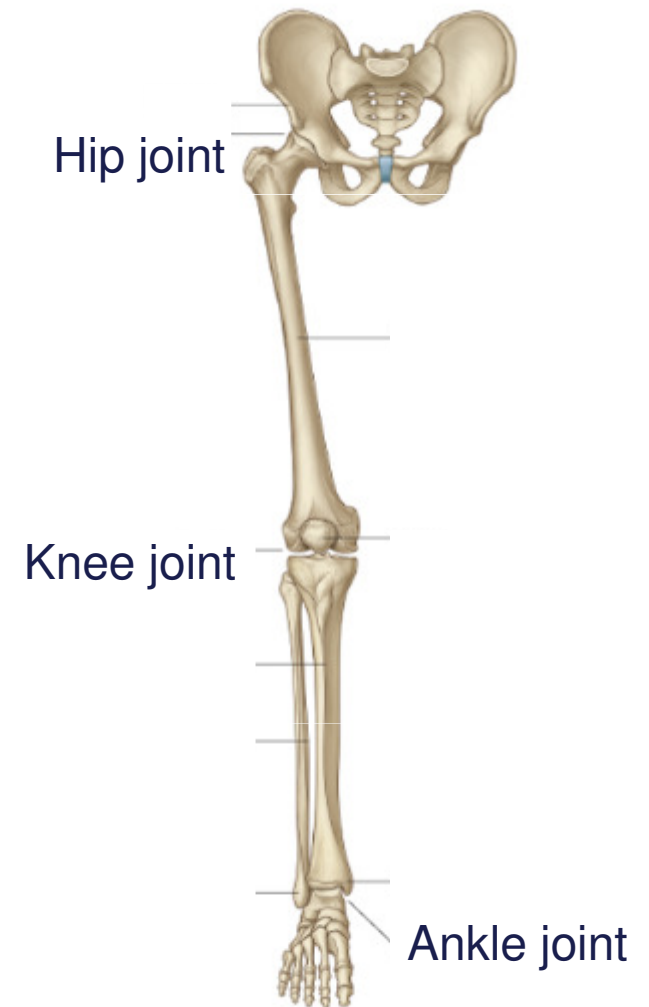
- tibia

- fibula



Joints

Joint	Bones	Type	Movements
Hip joint	Pelvis and femur	Ball and socket	Flexion, extension, abduction, adduction and circumduction
Knee joint	Femur, tibia and patella	Hinge	Flexion and extension
Ankle joint	Tibia, fibula and talus (a tarsal bone)	Hinge	Plantarflexion and dorsiflexion



Muscles

Muscle Compartment	Actions
Gluteal region	Extend, abduct and rotate the thigh at the hip joint.
Thigh	
• Anterior compartment	Extend the leg at the knee joint.
• Posterior compartment (hamstrings)	Extend the thigh at the hip joint and flex the leg at the knee joint.
• Medial compartment	Adduct the thigh at the hip joint.
Leg	
• Anterior compartment	Dorsiflex the foot and extend the digits.
• Posterior compartment	Plantarflex the foot and flex the digits.
• Lateral compartment	Evert the foot.
Foot	Support the arches of the foot.
