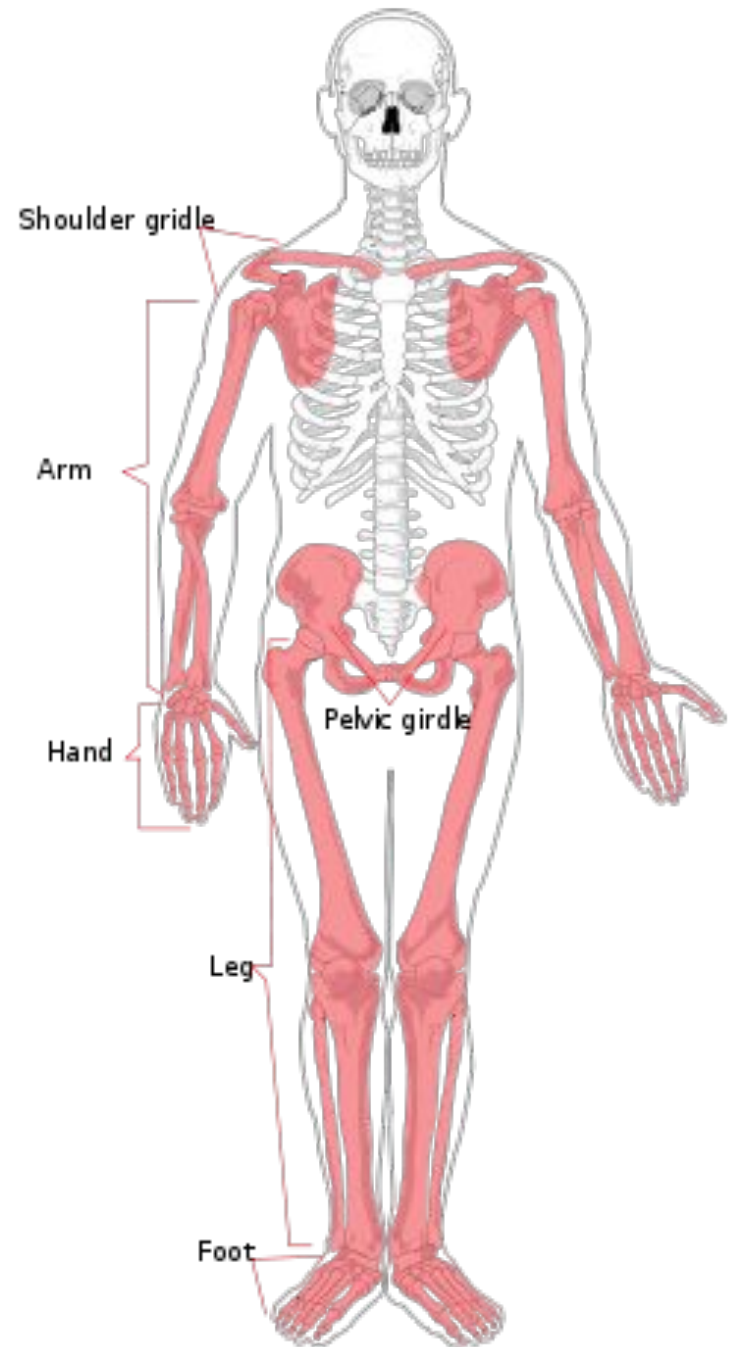


Appendicular Skeleton

- Composed of 126 bones
 - **Shoulder (pectoral) girdle**
 - **Upper Limbs (appendages)**
 - Arm and Hand
 - **Pelvic girdle**
 - **Lower Limbs (appendages)**
 - Leg and Foot

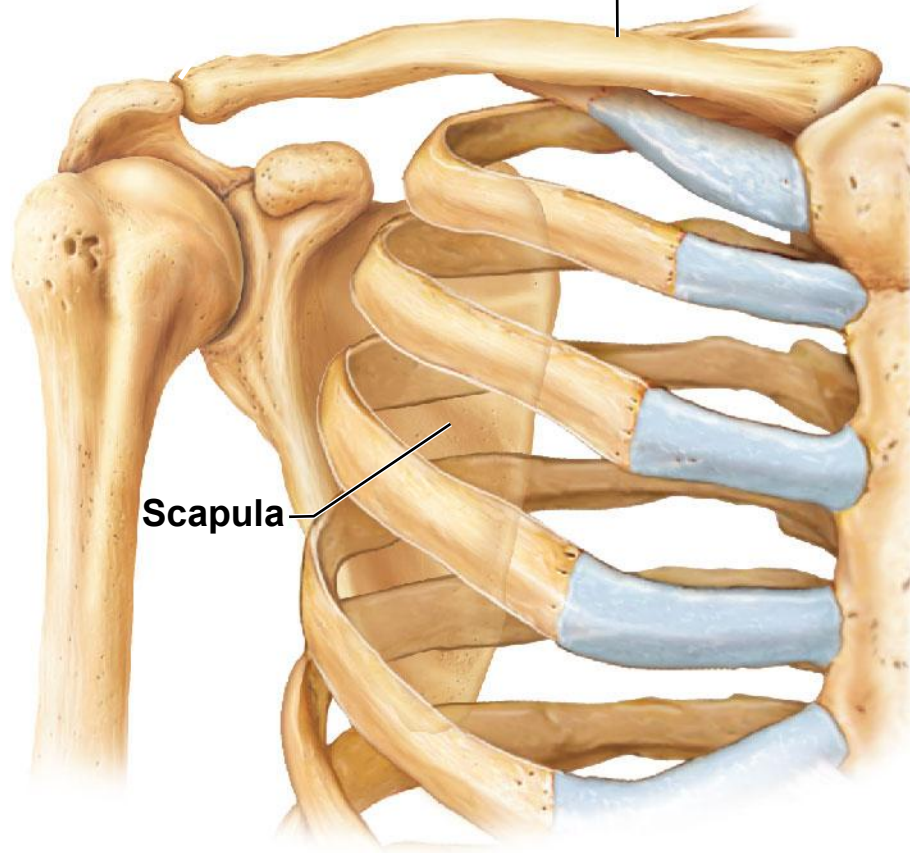


Bones of the Shoulder Girdle

- Composed of two bones that attach the upper limb to the axial skeleton
 1. **Clavicle (collar bone)**
 - **Slender, double curved bone**
 - **Attached to the sternum medially and the scapula laterally**
 - **Acts as a brace and prevents shoulder dislocation**
 2. **Scapula (shoulder blade)**
 - **Triangular, flattened body**
 - **Not directly attached to the axial skeleton**
- Light, poorly reinforced
- Allows the upper limb exceptional flexibility



Clavicle



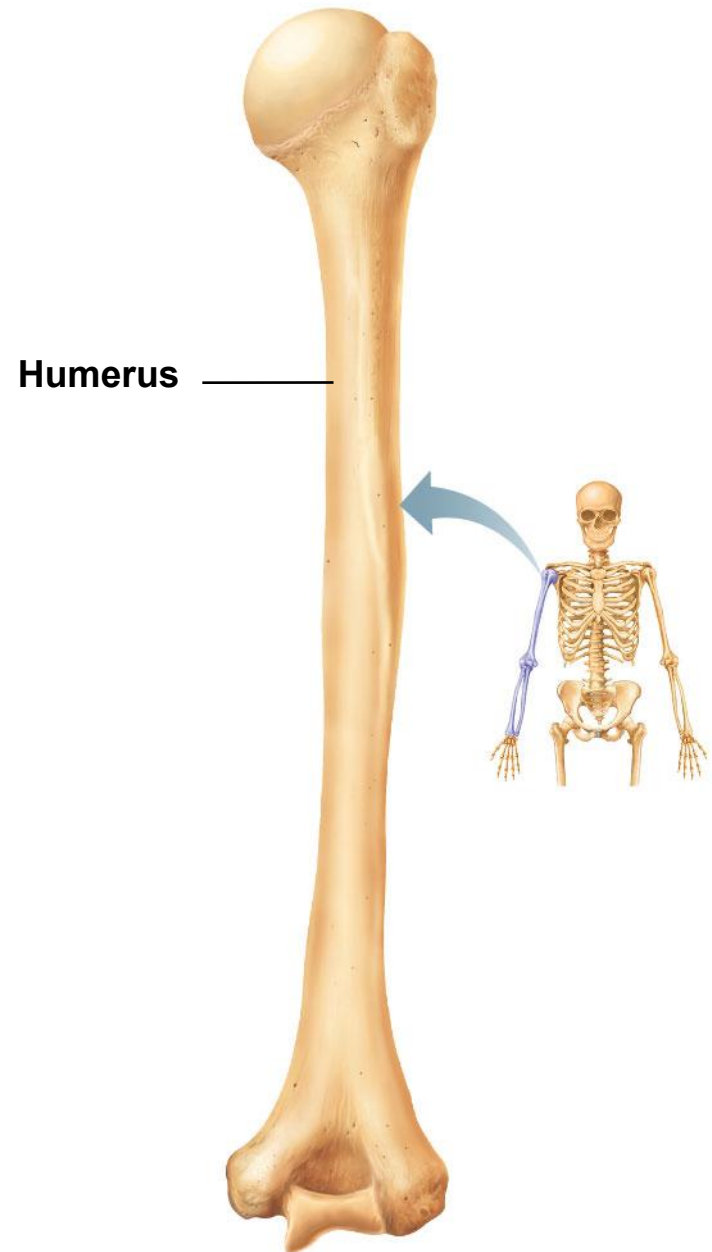
Scapula



Bones of the Upper Limbs

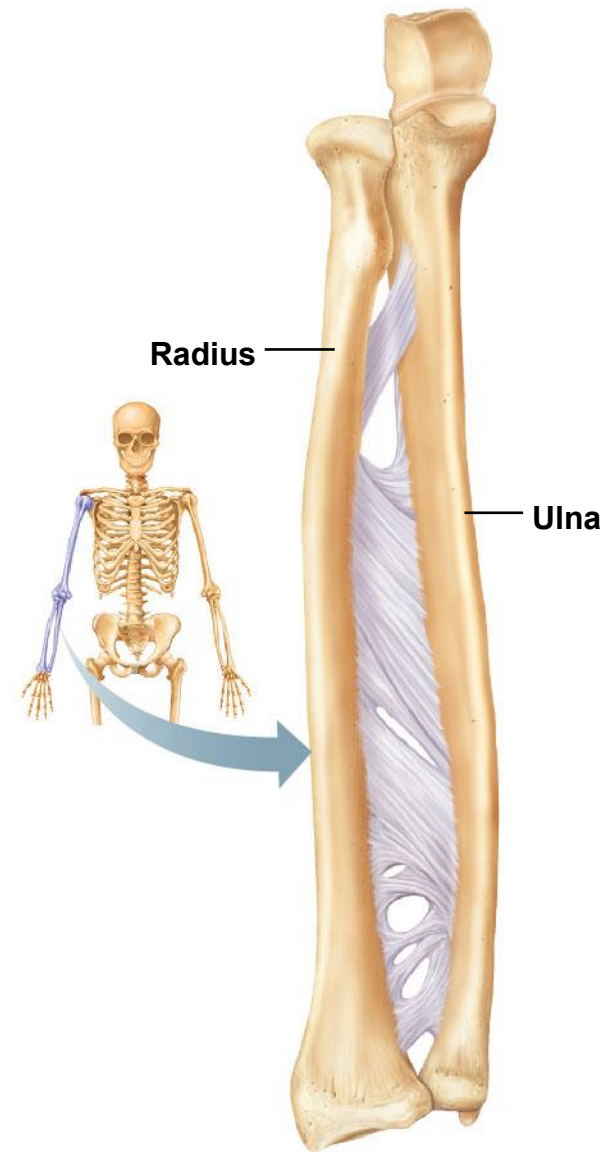
■ Humerus

- Forms the upper arm
- Single bone
- **Proximal end articulates with the scapula**
- **Distal end articulates with the bones of the forearm**



Bones of the Upper Limbs

- The forearm has two bones:
 1. **Ulna**
 - **Medial** bone in anatomical position
 - **Proximal end articulates with the humerus**
 2. **Radius**
 - **Lateral** bone in anatomical position
 - **Proximal end articulates with the humerus**



Bones of the Upper Limbs

- Hand:

- **Carpals**

- ✓ **Wrist bones**

- ✓ 8 bones arranged in two rows of 4 bones in each hand

- **Metacarpals**

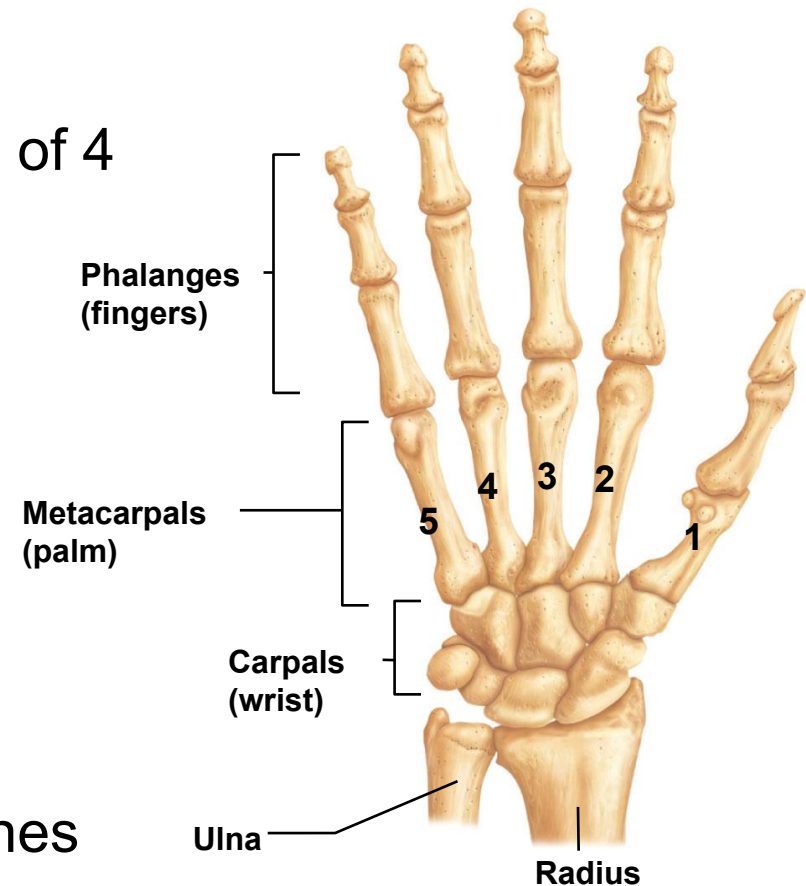
- ✓ **Palm bones**

- ✓ 5 bones per hand

- **Phalanges**

- ✓ **Fingers and Thumb**

- ✓ 14 bones in each hand
 - ✓ In each finger, there are 3 bones
 - ✓ In the thumb, there are only 2 bones



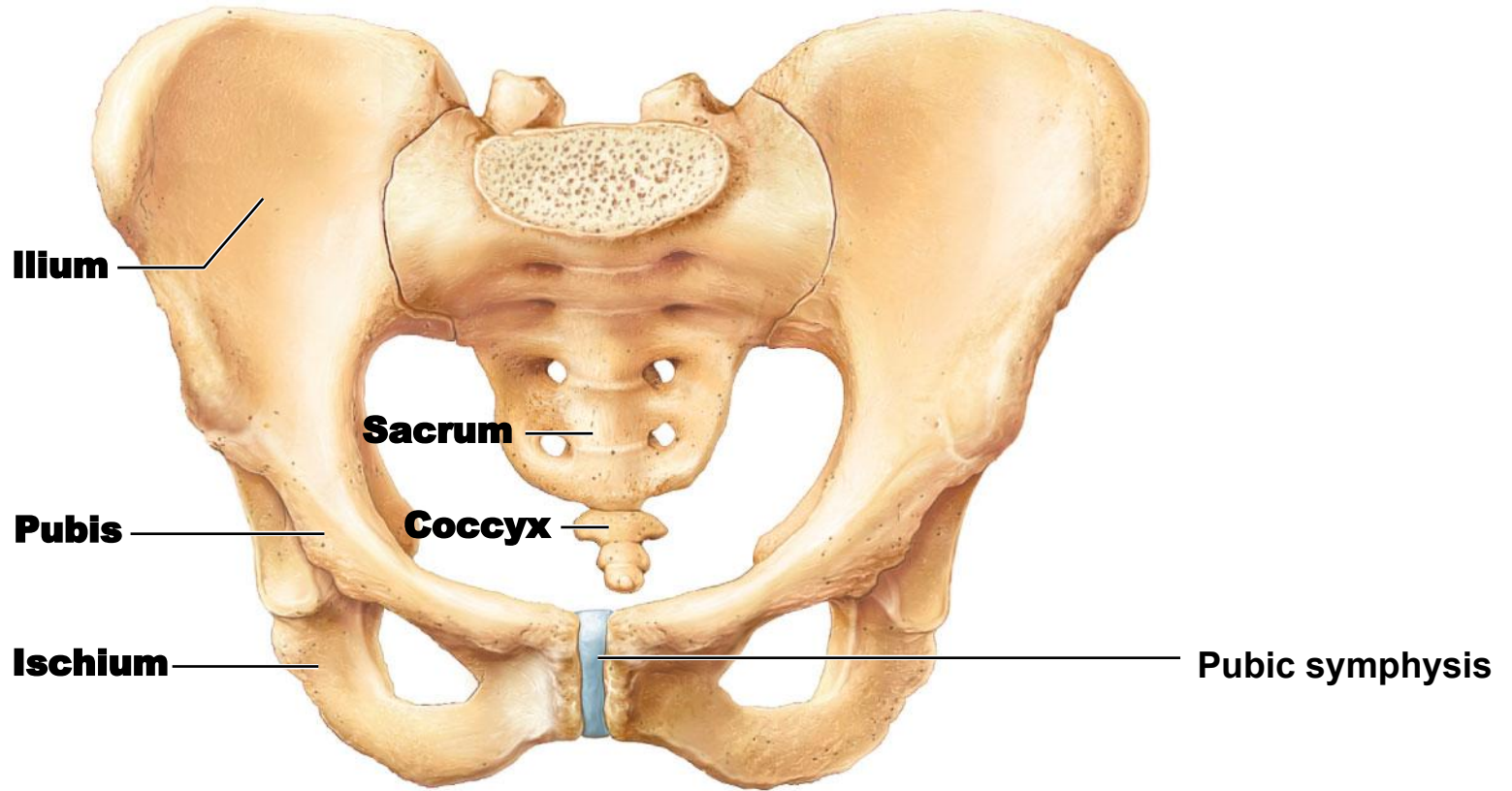
Bones of the Pelvic Girdle

- **Bearing weight** is the most important function of the pelvic girdle

- Pelvis also **protects several organs**
 - **Reproductive organs**
 - **Urinary bladder**
 - **Part of the large intestine**

Bones of the Pelvic Girdle

- Composed of three pairs of fused bones
 - Ilium
 - ✓ Large, flaring bone
 - ✓ Connects posteriorly with the sacrum
 - Ischium
 - ✓ “Sit-down bone”
 - ✓ Most inferior part of the pelvic girdle
 - Pubis
 - ✓ Most anterior part of the pelvic girdle
 - ✓ The pubic bones articulate anteriorly to form a fibrocartilaginous joint, the **pubic symphysis**



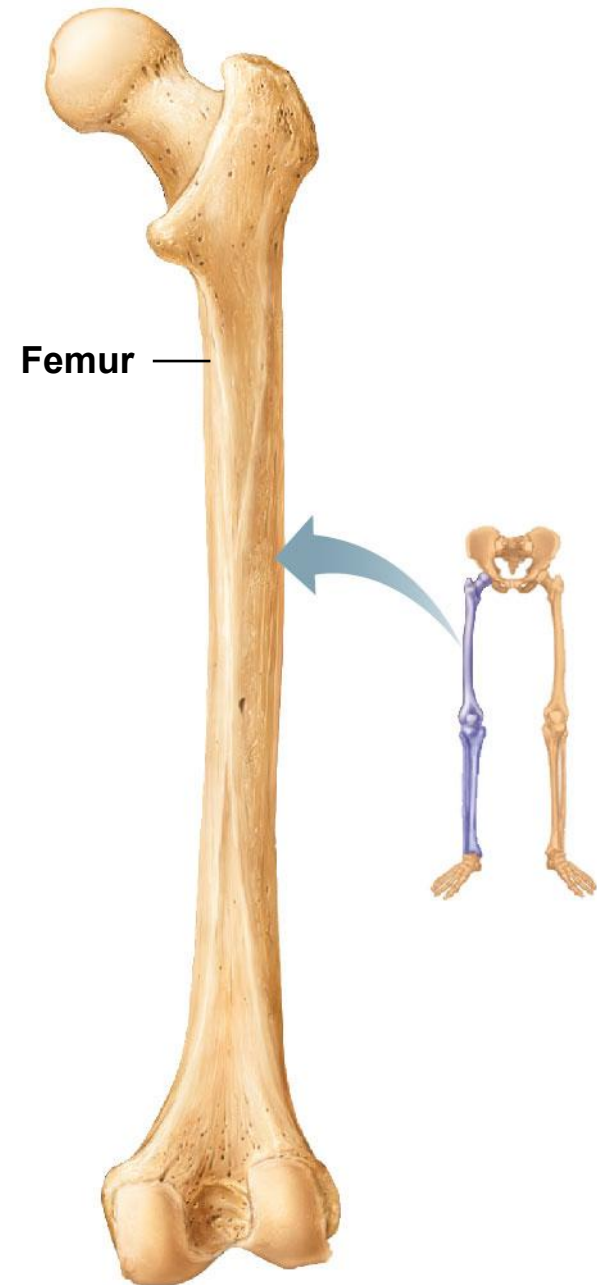
Bones of the Lower Limbs

■ Femur

- Thigh bone
- Heaviest, strongest bone in the body
- **Proximal end articulates with the pelvic girdle**
- **Distal end articulates with the tibia in the lower leg**

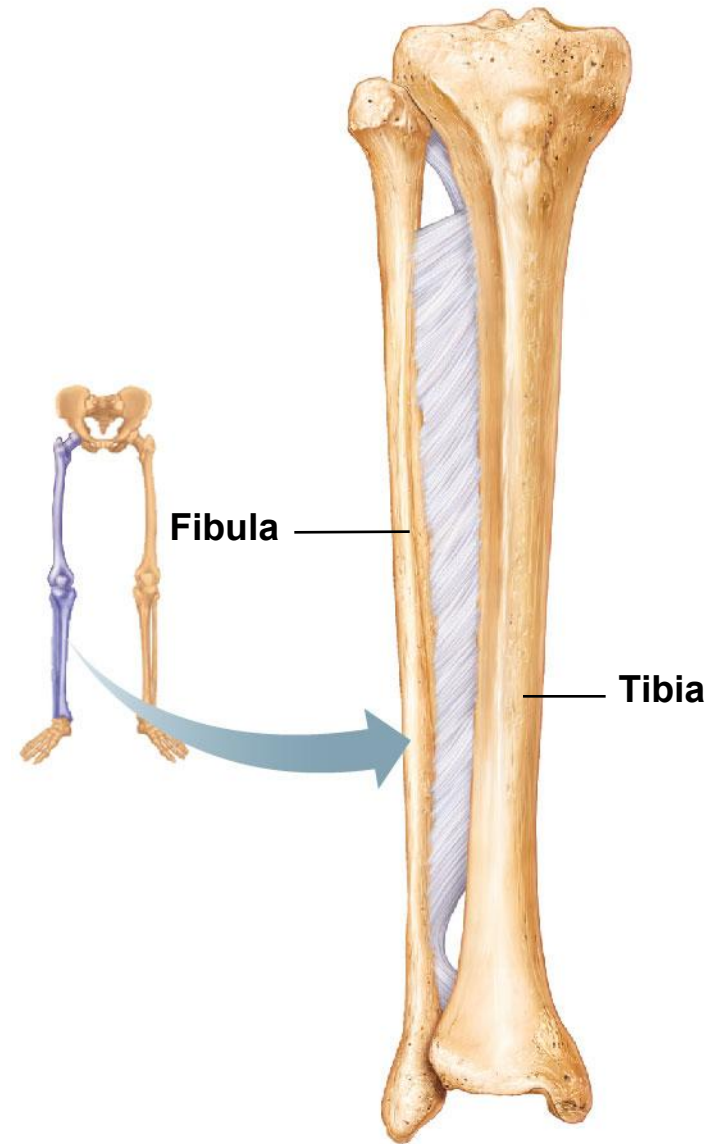
■ Patella

- Kneecap
- **Covers and protects the anterior surface of the knee joint**



Bones of the Lower Limbs

- The lower leg has two bones:
 1. **Tibia**
 - Shinbone
 - Larger and **medially oriented**
 - **Proximal end articulates with the femur to form the knee joint**
 2. **Fibula**
 - Thin and sticklike
 - **Lateral** to the tibia
 - Has no role in forming the knee joint



Bones of the Lower Limbs

- **Foot**
 - **Tarsals**
 - **Ankle bones**
 - 7 bones
 - **Metatarsals**
 - **Sole of the foot bones**
 - 5 bones
 - **Phalanges**
 - **Toes**
 - 14 bones in each hand
 - In each toe, there are 3 bones
 - In the big toe, there are only 2 bones

