

Anatomy teamwork

Lecture 1

Anatomical Terminology & Skeletal System

Color coding

- Very important
- Female notes
- Male notes

هذا العمل لا يعني عن المصدر الأساسي للمذاكرة

Objectives

- ❑ Define the word “Anatomy”
- ❑ Enumerate the different anatomical fields
- ❑ Describe the anatomical position
- ❑ Describe different anatomical terms of position & movements as well different anatomical planes
- ❑ Classify bones according to shape, structure & development
- ❑ Enumerate different bones of both axial & appendicular skeleton

Anatomy

The science which deals with the study of the structure and shape of the body & body parts, and their relationships to one another

Anatomy

Gross Anatomy

Study of the human body with naked eye.

Microscopic Anatomy (Histology)

Study of fine structures (cells & tissues) of the human body with the help of microscope.

Developmental Anatomy (Embryology)

Radiological Anatomy

Study of bodily structure using radiograph and other imaging methods.

Applied Anatomy

The practical application knowledge to diagnosis and treatment.

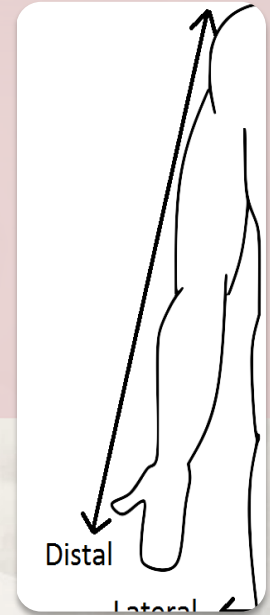
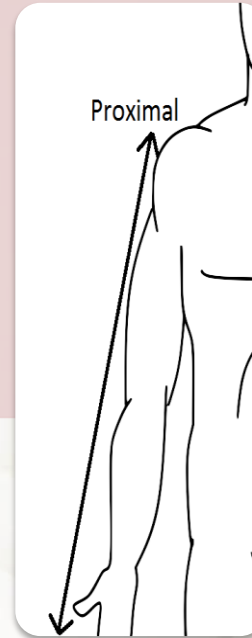
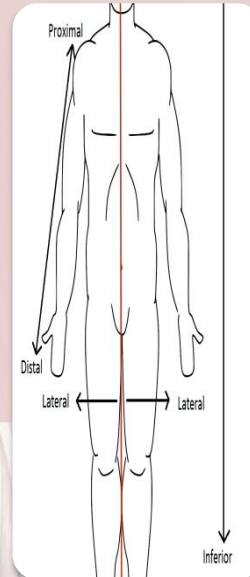
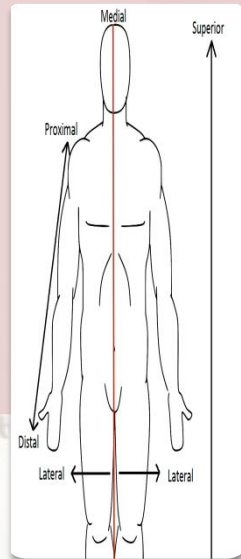
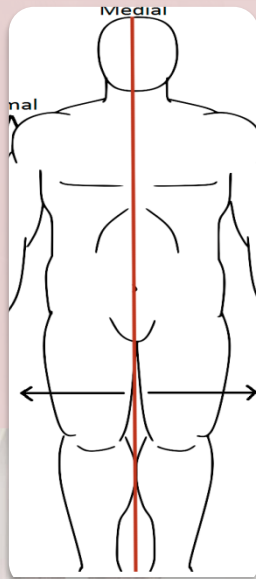
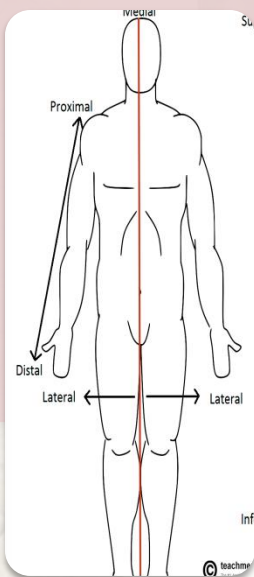
Surgical Anatomy

Study of anatomical structures in reference to the surgical diagnosis and treatment.

Cross-sectional Anatomy

Studying the human body through a transverse cut through a structure or tissue

Terms Of Positions



Lateral

Away from the median plane

Medial

nearer to the median plane

Superior (cranial, dorsal)

Nearer to the head.

Inferior (caudal)

Away from the head.

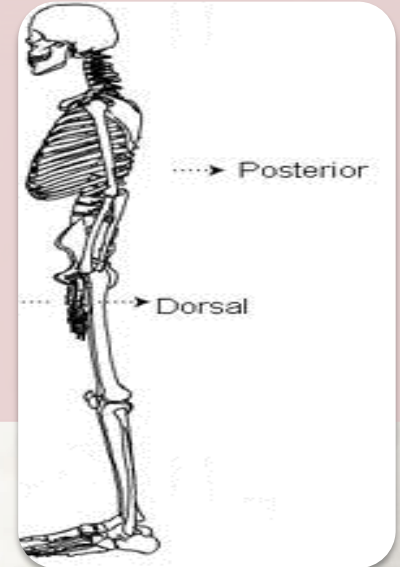
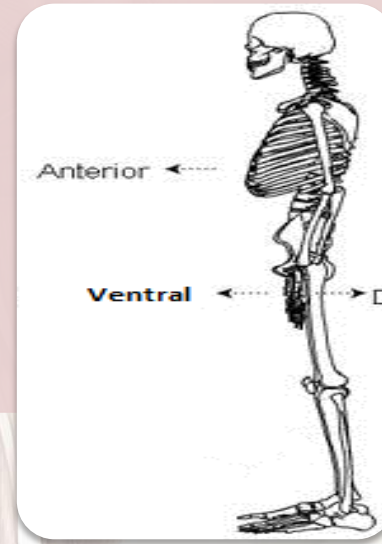
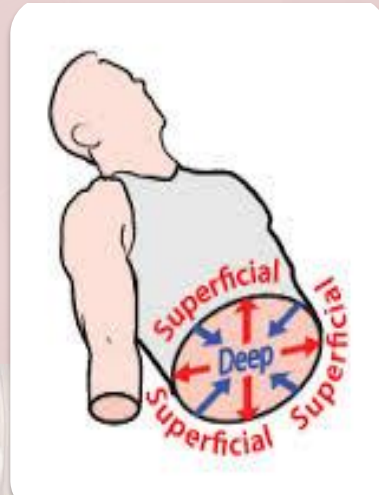
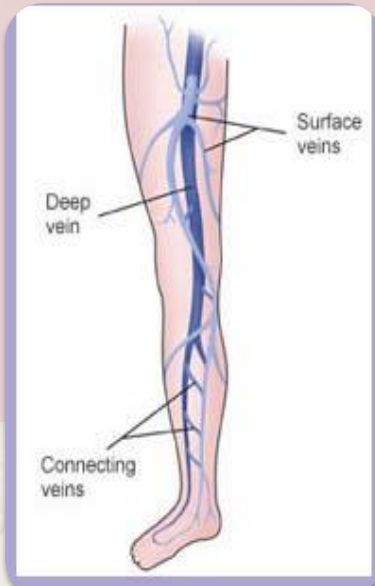
Proximal

Nearer to the trunk

Distal

Away from the trunk

Terms Of Positions



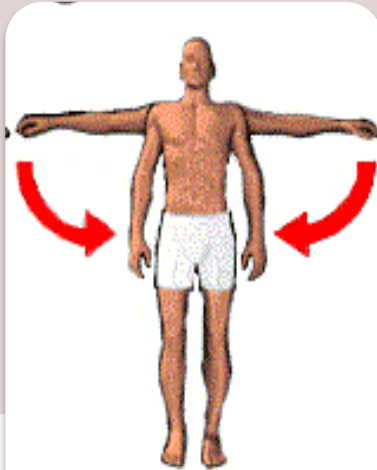
Deep
away from the skin
(surface).

Superficial
nearer to the skin
(surface).

Anterior
(ventral)
nearer to the front.

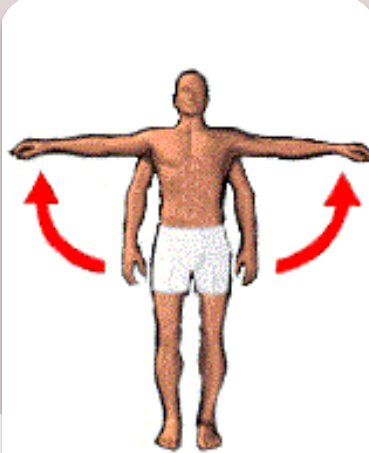
Posterior
(dorsal)
nearer to the back.

Terms Of Movement



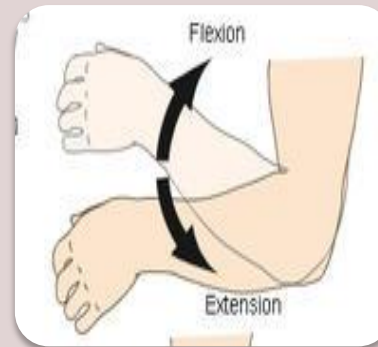
Adduction

Adduction
Toward
median plane



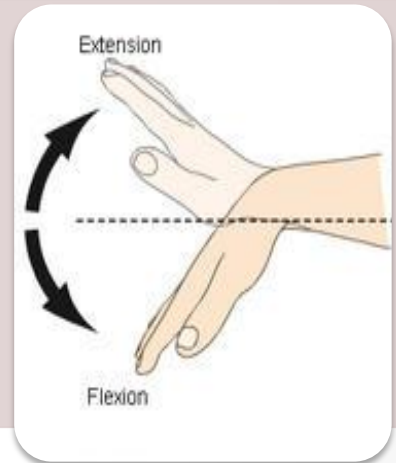
Abduction

Abduction
away from
median plane



Extension

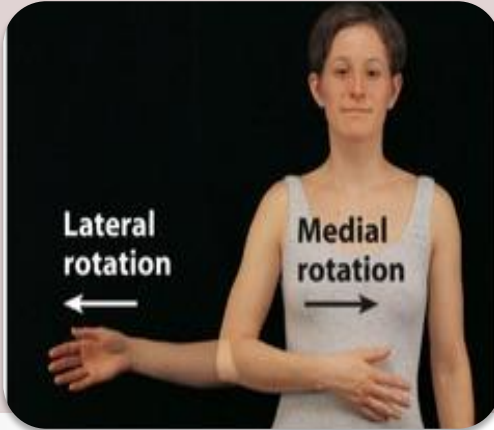
Straightening
(increasing the
angle between
2 parts)



Flexion

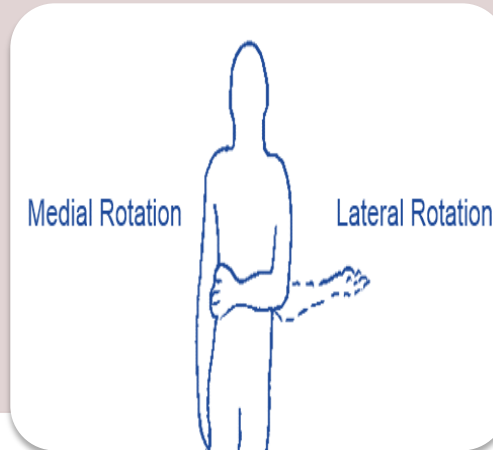
Approximation
of 2 parts
(decreasing the
angle between
2 parts)

Terms Of Movement



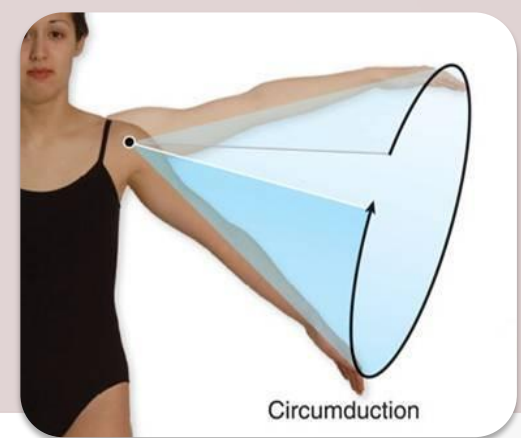
Lateral Rotation

Rotation away from the median plan.



Median Rotation

Rotation toward median plane

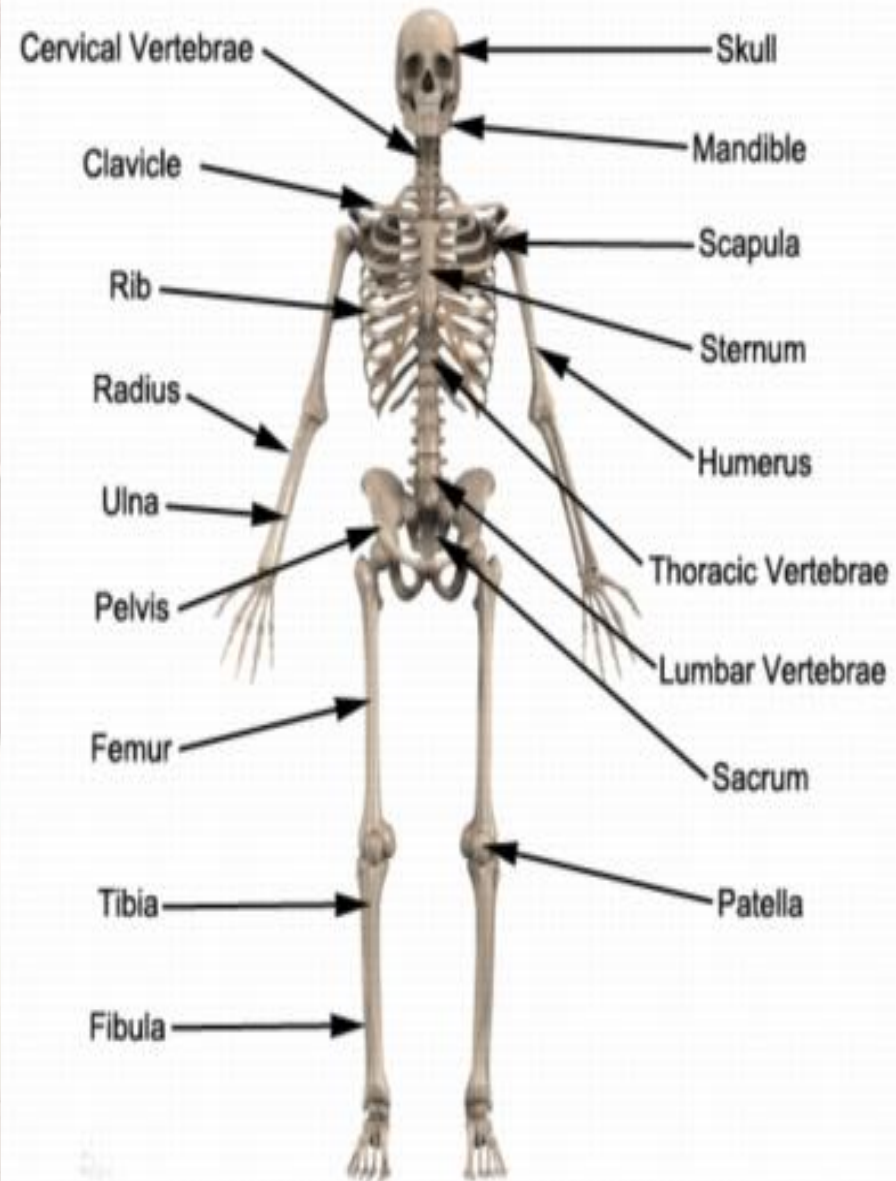
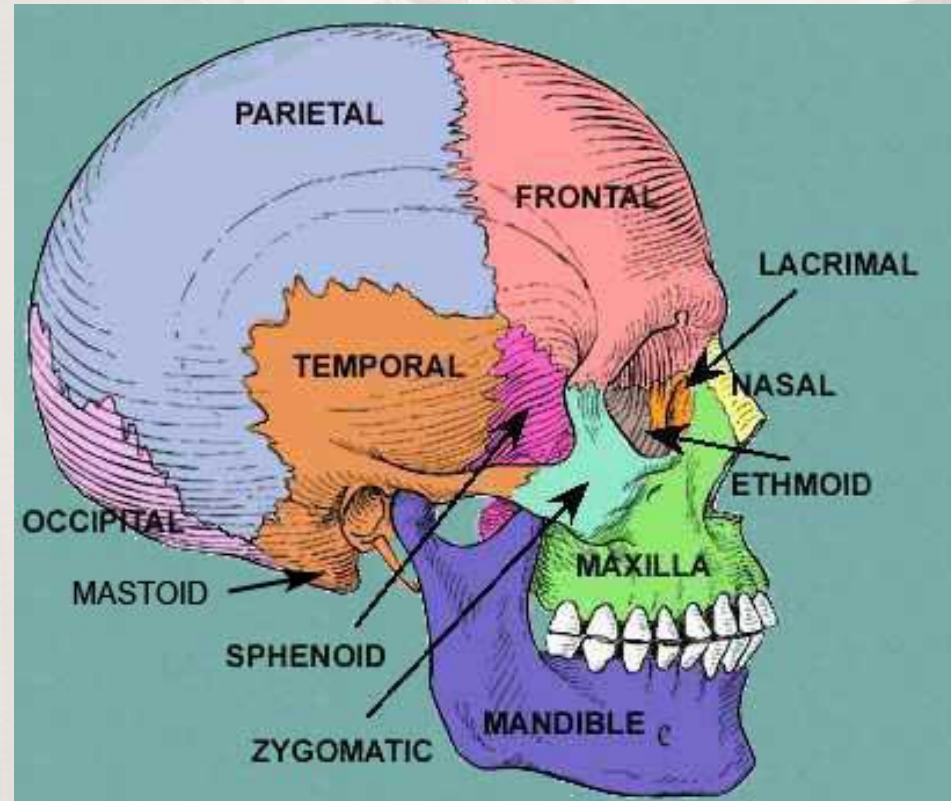


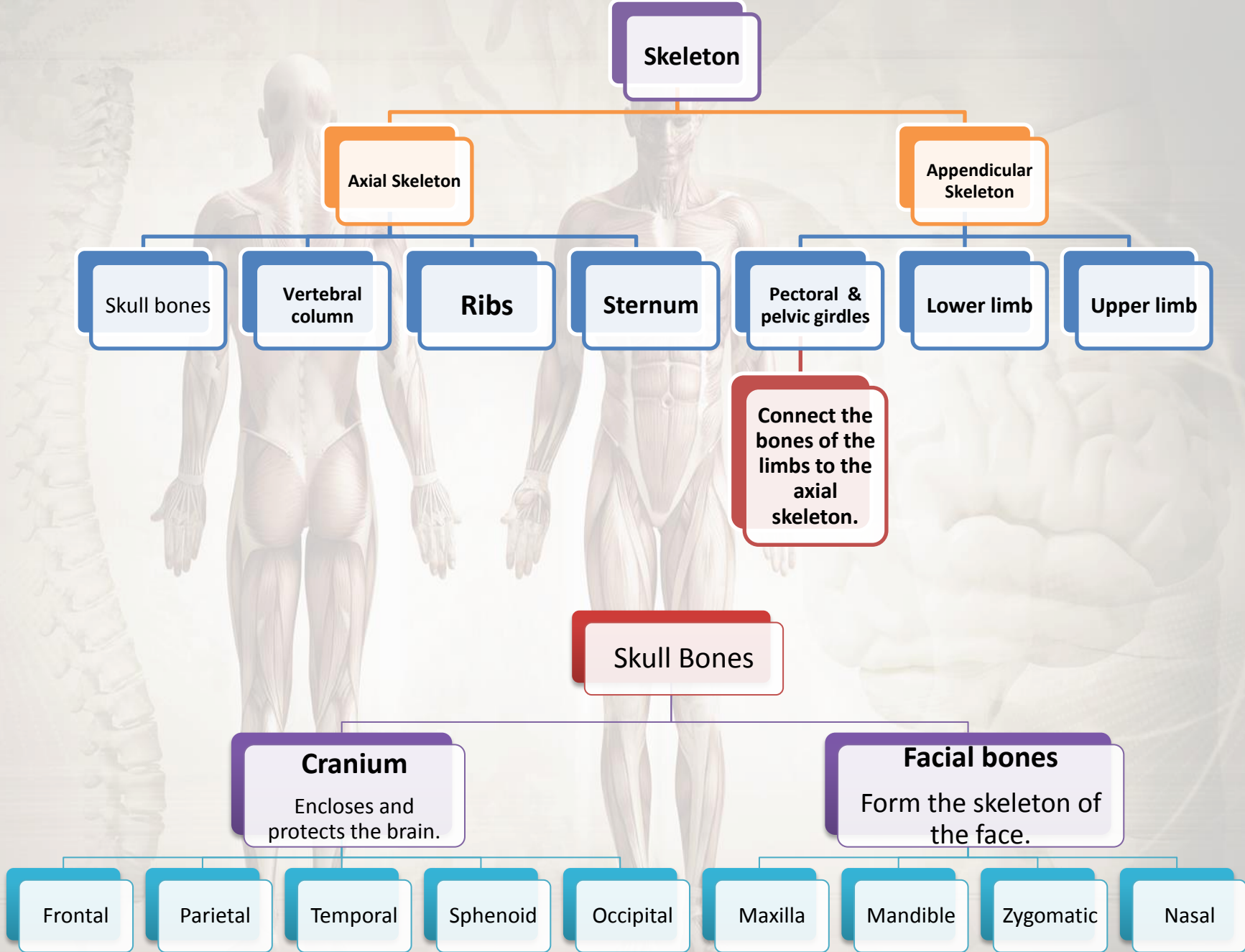
Circumduction

Combined movement of flexion ,extension, adduction, abduction.

Bones of the skull

Main bones in the human body





Skeleton

Axial Skeleton

Appendicular Skeleton

Skull bones

Vertebral column

Ribs

Sternum

Pectoral & pelvic girdles

Lower limb

Upper limb

Connect the bones of the limbs to the axial skeleton.

Skull Bones

Cranium

Encloses and protects the brain.

Facial bones

Form the skeleton of the face.

Frontal

Parietal

Temporal

Sphenoid

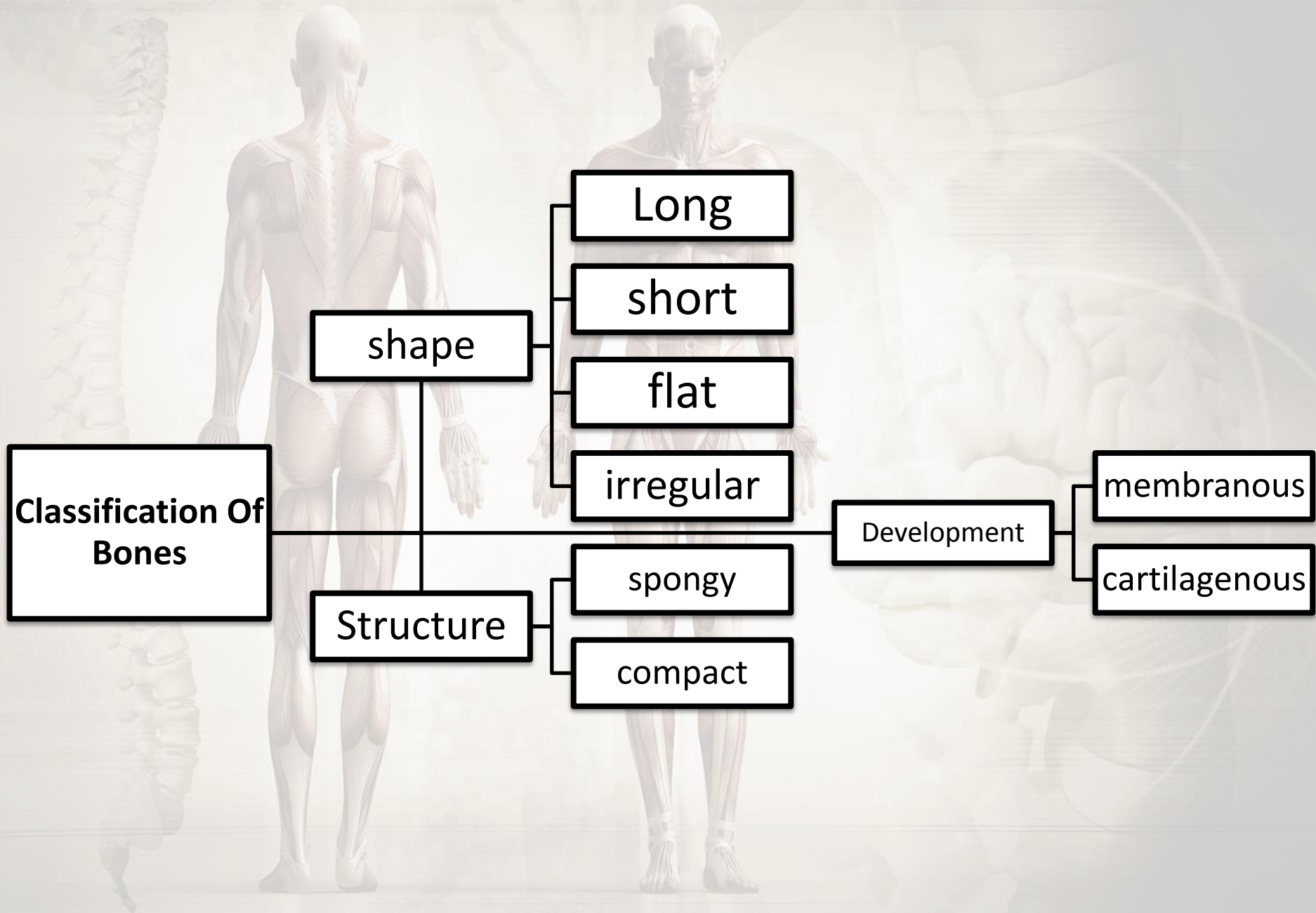
Occipital

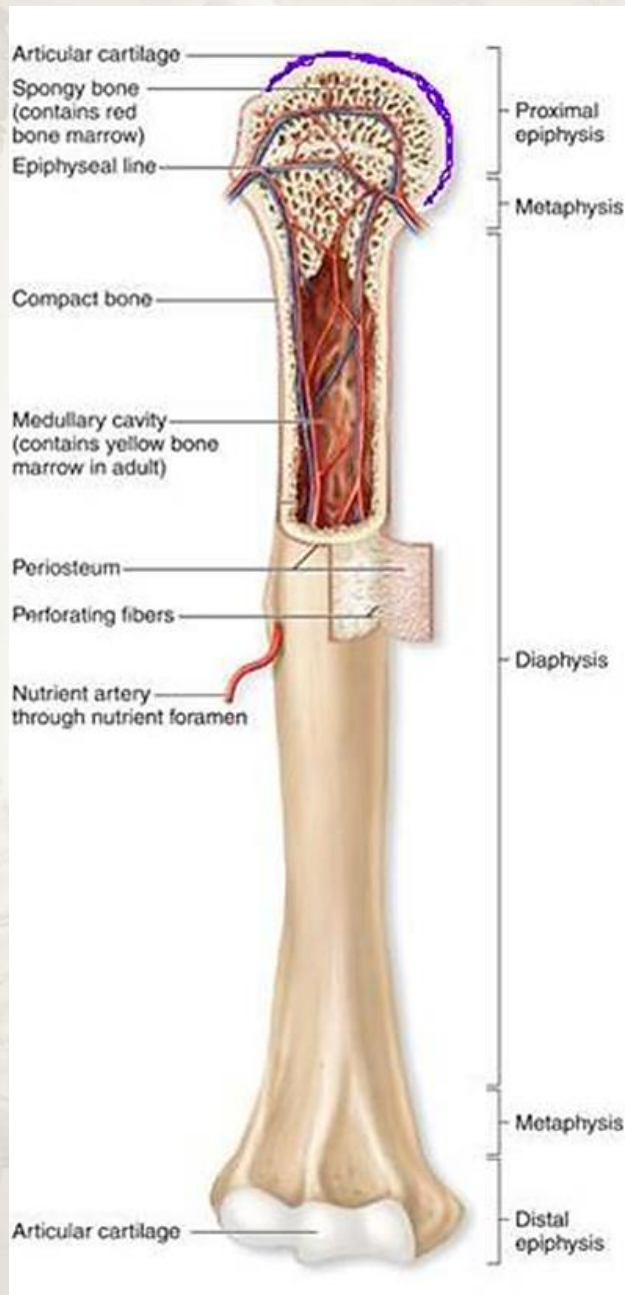
Maxilla

Mandible

Zygomatic

Nasal

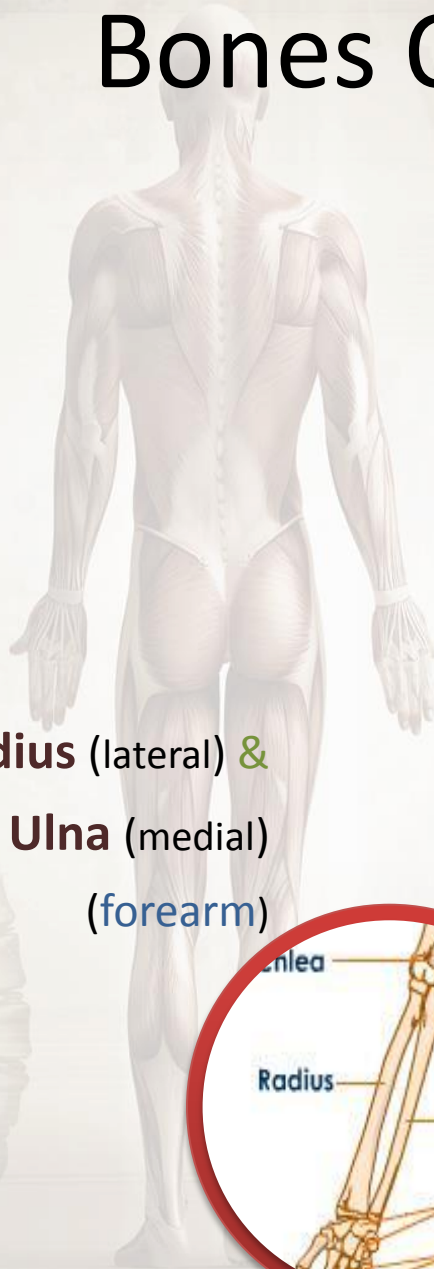




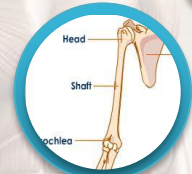
Long bones are formed of:

- **A shaft (diaphysis):** composed of compact bone.
- **Two ends (epiphysis):** composed of spongy bone.
- The region of contact between epiphysis & diaphysis is called: **metaphysis: contains epiphyseal plate of cartilage responsible for linear bone growth.**

Bones Of The Upper Limb



Radius (lateral) &
Ulna (medial)
(forearm)

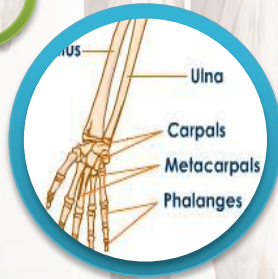


Humerus (arm)



14 phalanges

(2 for the thumb & 3 for each of
medial 4 fingers)

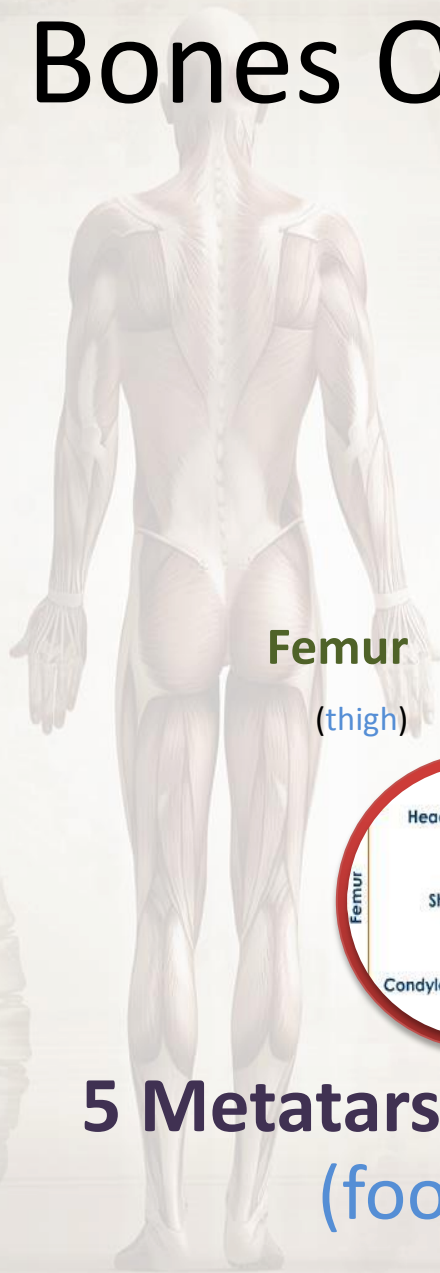


5 Metacarpal bones

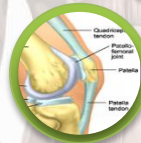


8 carpal bones

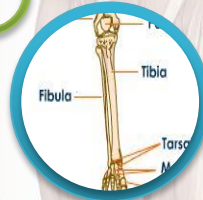
Bones Of The Lower Limb



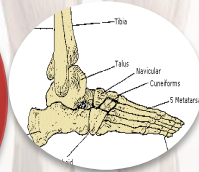
Femur
(thigh)



Patella
(knee)

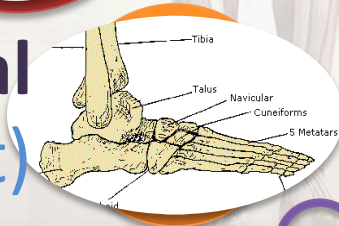


Fibula (lateral) & **Tibia**
(medial) (leg bones)



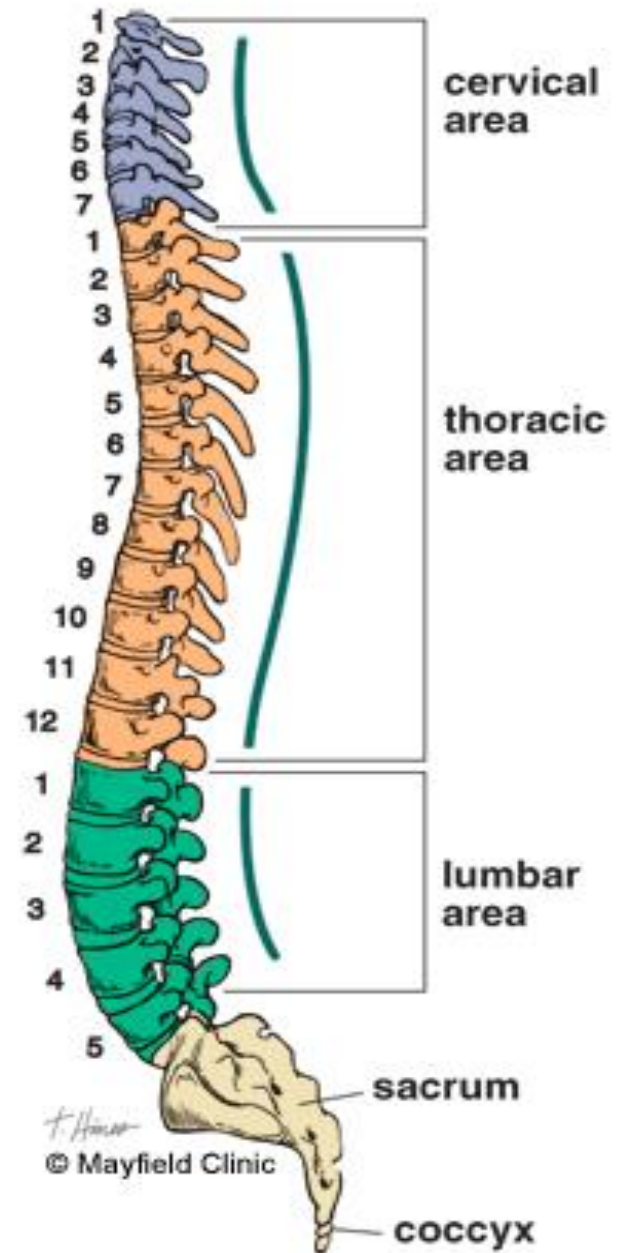
14 phalanges
(2 for big toe & 3 for each of lateral 4 toes)
(foot)

5 Metatarsal
(foot)

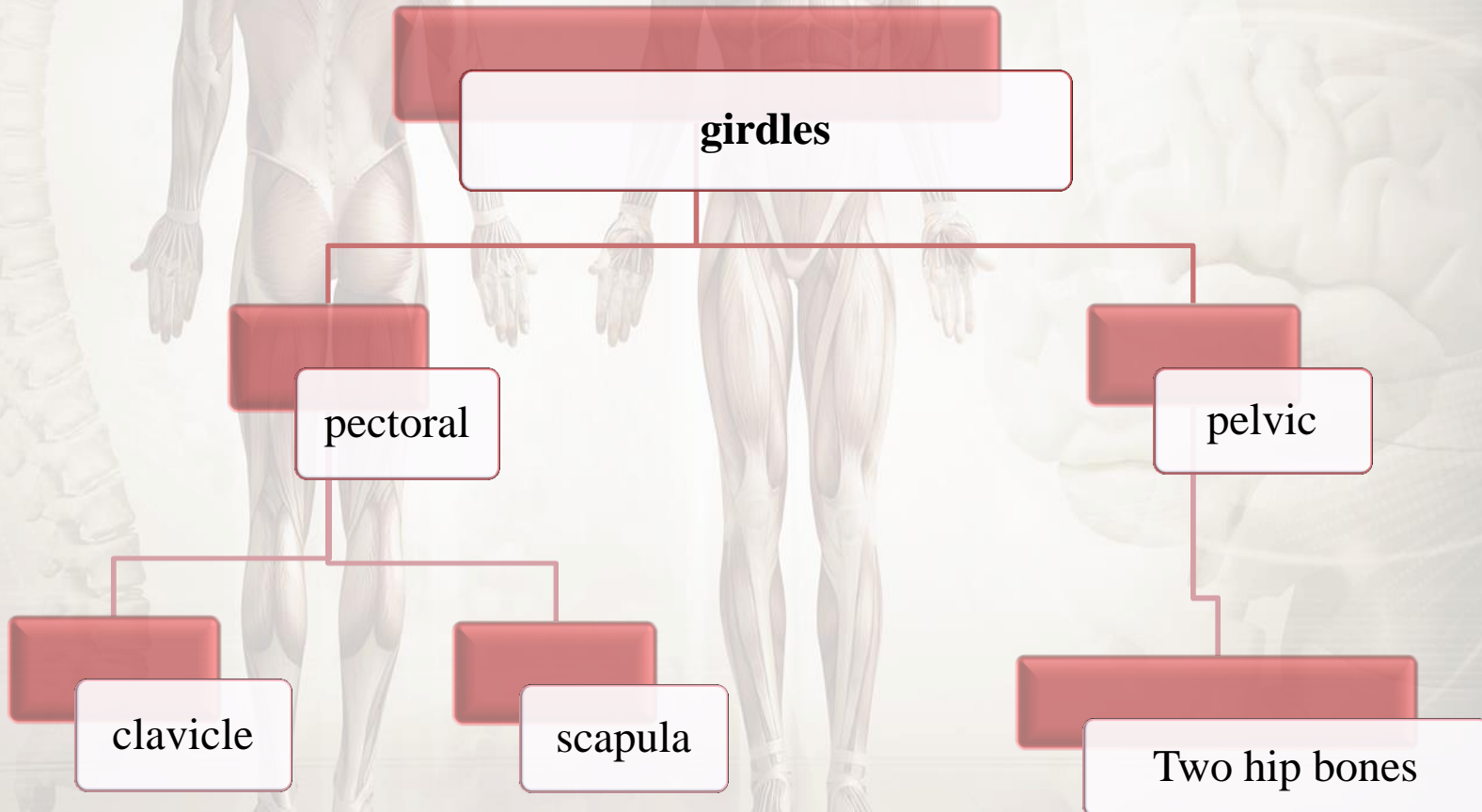


The vertebral column

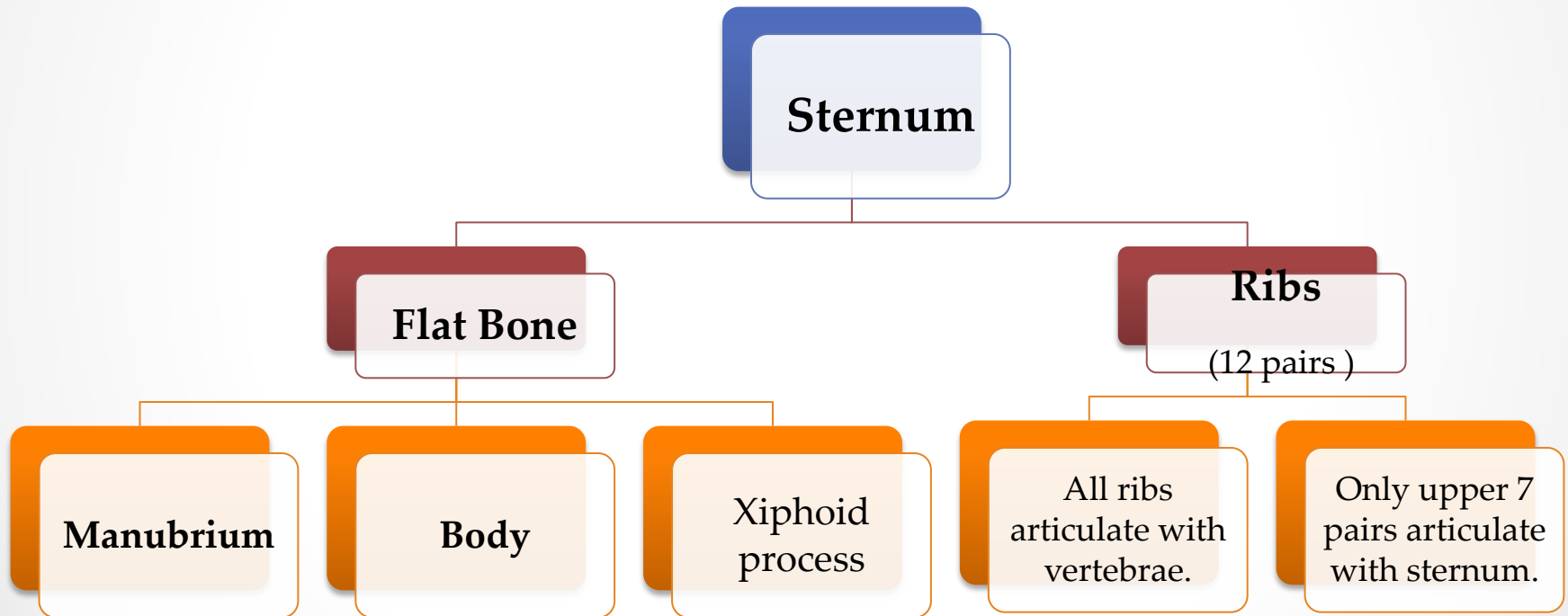
- It supports the axial skeleton .
- Formed of **33** irregular bones (vertebrae)
- Spinal cord runs through its cavity.
- It is divided into 5 regions:
 - 1- Cervical (**7** vertebrae)
 - 2- Thoracic (**12** vertebrae)
 - 3- Lumbar (**5** vertebrae)
 - 4- Sacral (**5** vertebrae) fused to form triangular bone = sacrum
 - 5- Coccygeal (**4** vertebrae) fused to form a small bone called coccyx



Classifications of girdles

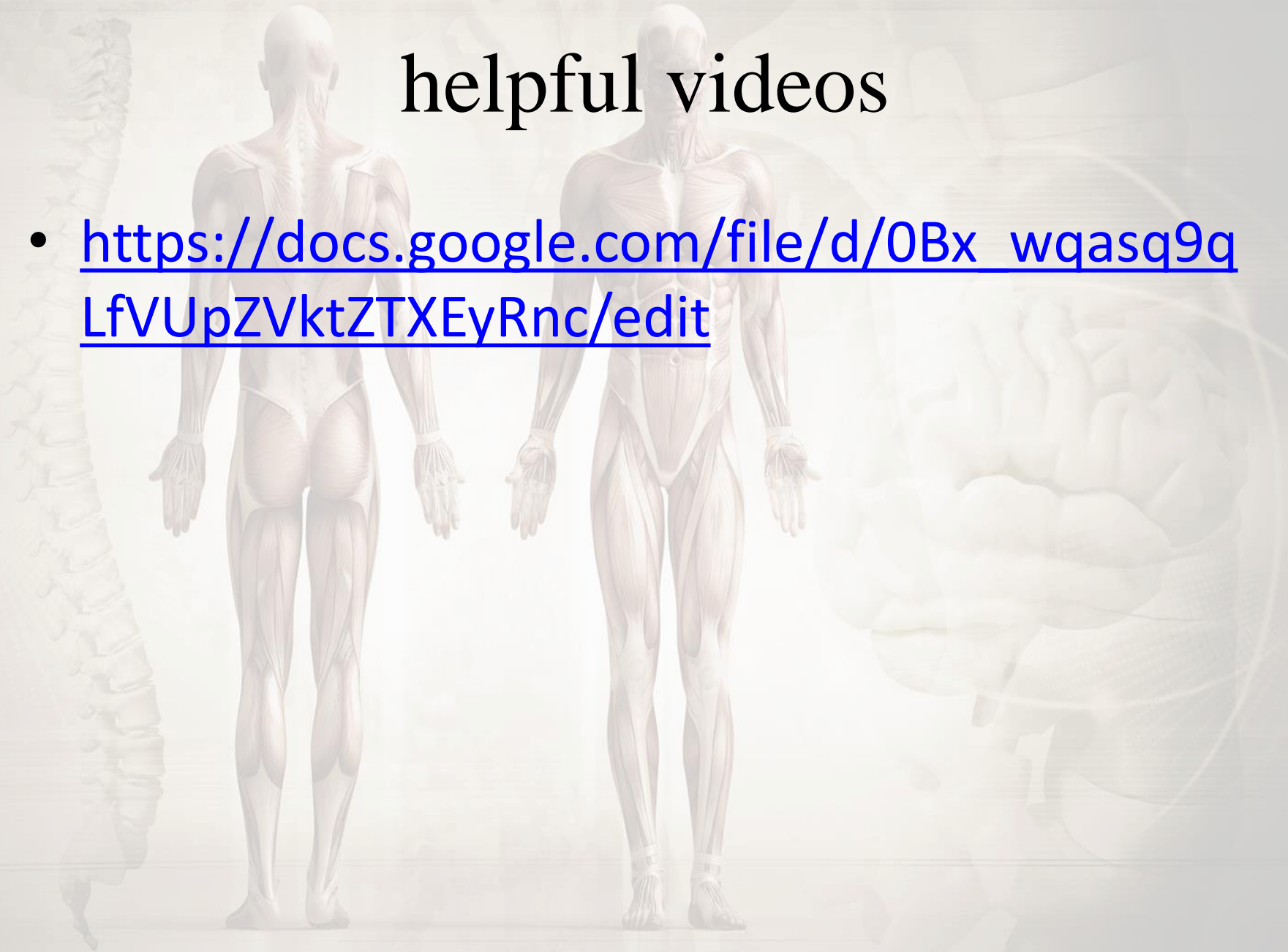


Sternum



helpful videos

- https://docs.google.com/file/d/0Bx_wqasq9qLfVUpZVktZTXEyRnc/edit



عمل الفريق

لمياء الذوادي

معاذ البطاح

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إلهام الغامدي

أمل أفراح

عبدالرحمن الكاف

عبدالعزیز النوييت

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نهى القويز