

BODY MOVEMENTS

CHAPTER 8

MODULE 2

RECAP

- Movement is when a living organism moves a body part or parts without changing the position of the organism
- Animals carry out many activities which involve the displacement of an organism from its original position. This activity carried out by the organism is called locomotion.
- MOVABLE JOINT- Joints where bones can move
- IMMOVABLE JOINT-Joints where bones cannot move.
- Types of movable joints: Pivot joint, Ball and Socket joint , Hinge joint, Gliding joints

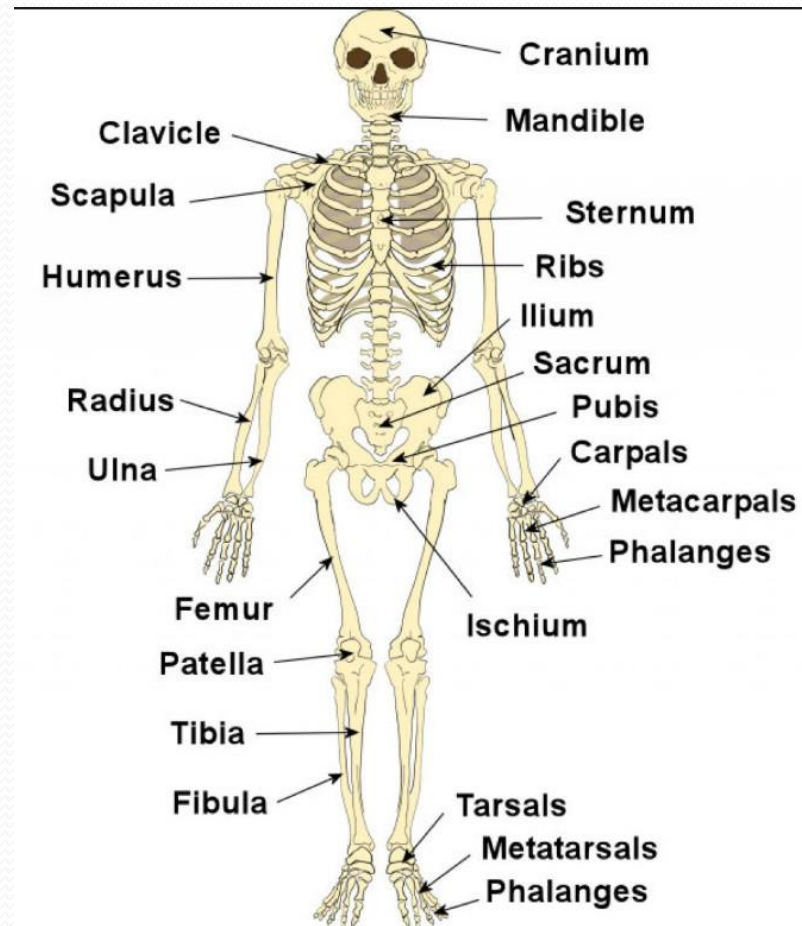


BODY MOVEMENTS AND LOCOMOTION IN HUMAN BEINGS

Locomotion is the main characteristic feature that distinguishes animals from plants. In human beings, various body movements and locomotion are controlled by skeletal system and muscular system..

The skeletal system is made of bones and muscular system is made of muscles.

SKELETAL SYSTEM



SKELETAL SYSTEM CONTINUED....

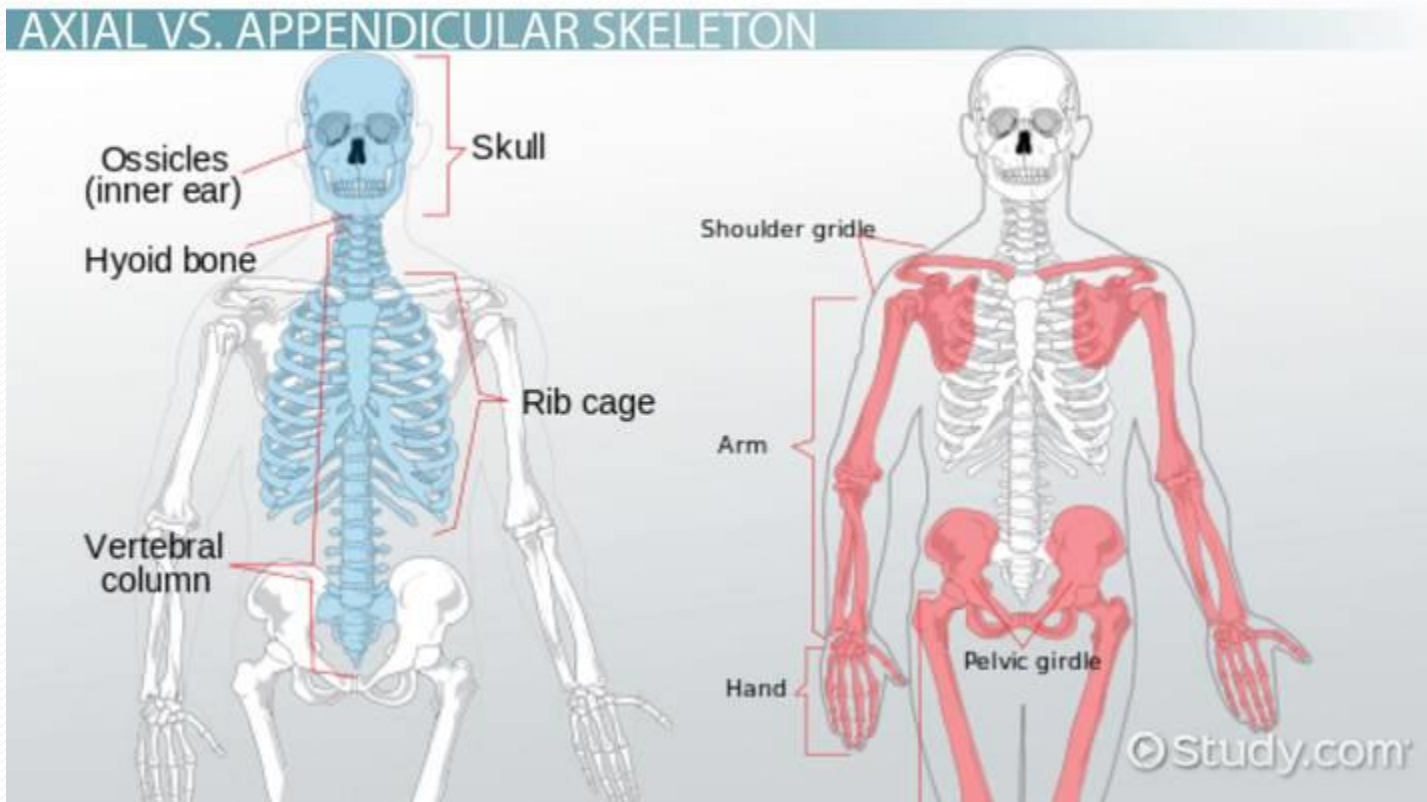
- The system that supports the overall body by providing a definite shape and helps in the movement is known as skeletal system.
- Skeleton is the framework of bones in the body.
- The adult human skeleton consists of 206 bones.
- They are very hard on the outer side and soft on the inner side.

FUNCTIONS OF SKELETON

❖ FUNCTIONS OF SKELETON

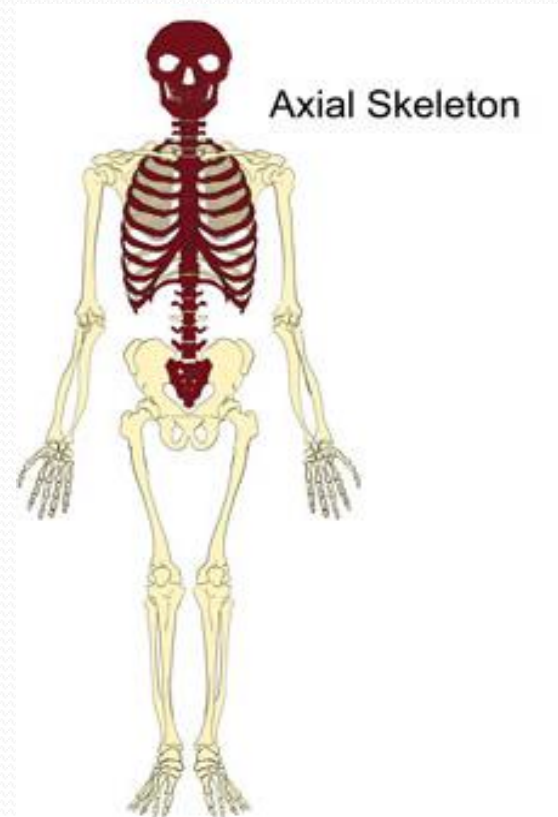
- Protection to vital organs.
- Support to body.
- Shape to body.
- Movement of body organs

HUMAN SKELETAL SYSTEM CONTINUED....

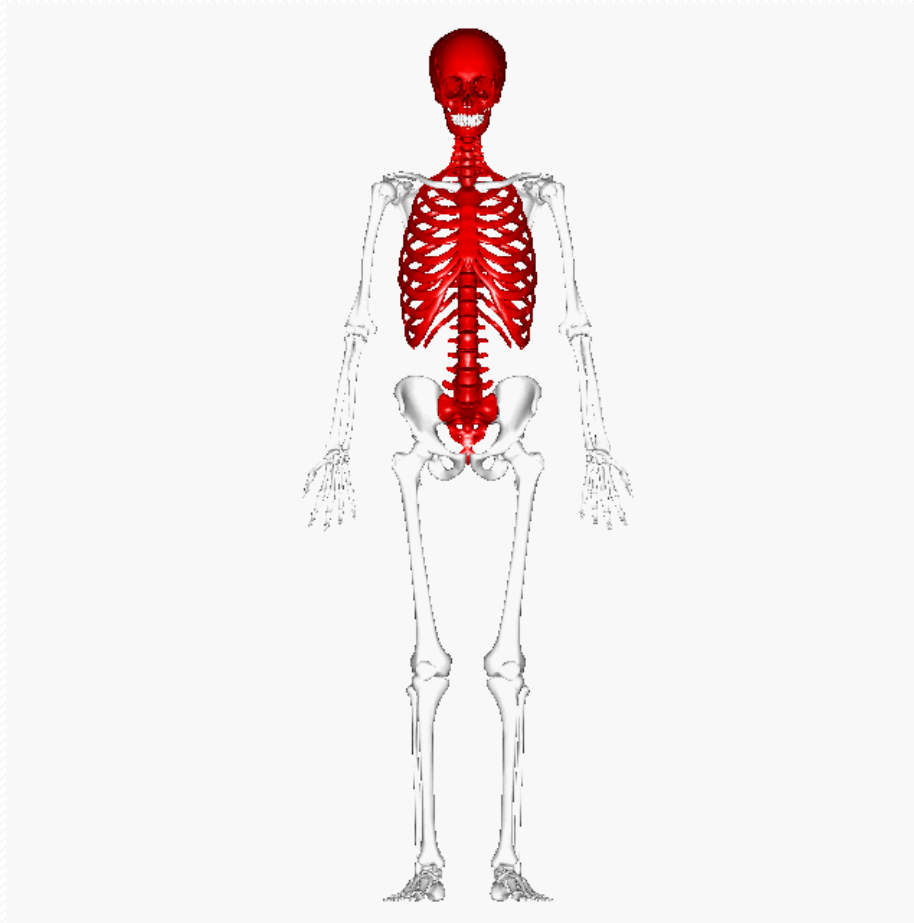


AXIAL SKELETON

- The axial skeleton is made of following parts.
- Skull
- Vertebral column(backbone)
- Sternum(breast bone)



AXIAL SKELETON



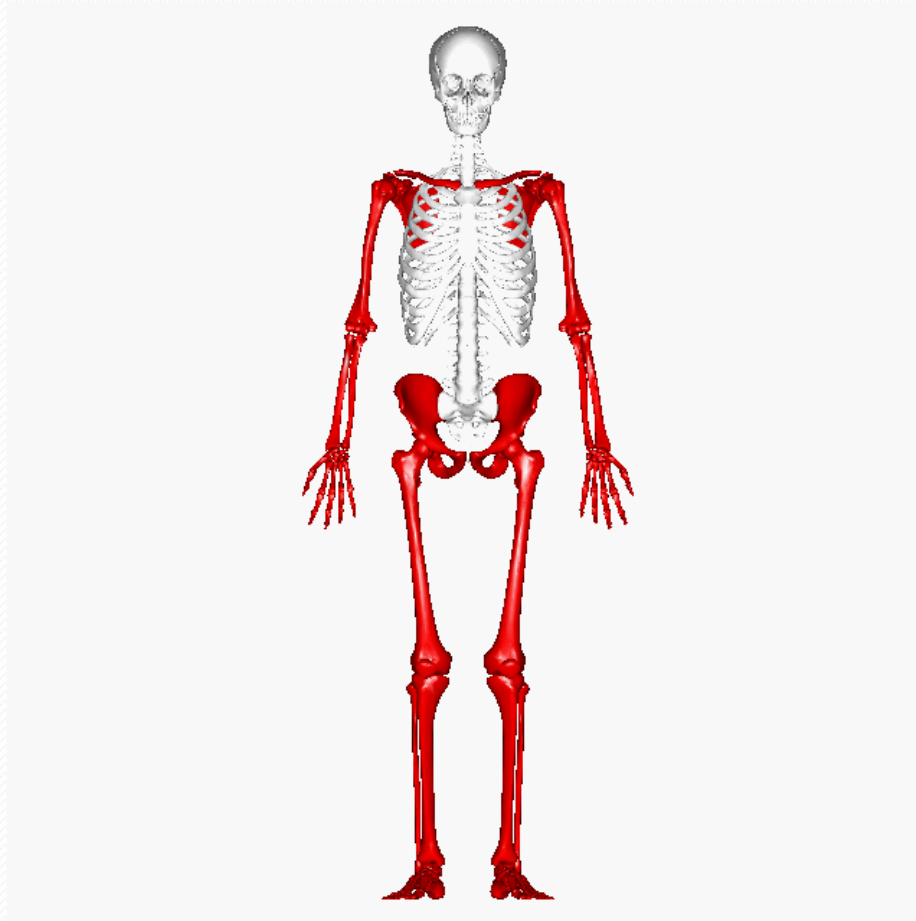
APPENDICULAR SKELETON

Appendicular Skeleton



- The appendicular skeleton consists of upper and lower limbs and girdles.
- The bones that provide support and space for the movement of limb bones are known as girdles.
- Pectoral girdle is located on upper part of body.
- Pelvic girdle is located on the lower part of body.

APPENDICULAR SKELETON



PARTS OF AXIAL SKELETON

- Skull

1. It is the bony framework of head.
2. It is made of many bones joined together.
3. It protects a very important part of the body, the brain.



PARTS OF AXIAL SKELETON CONTINUED...

- **Vertebral column**

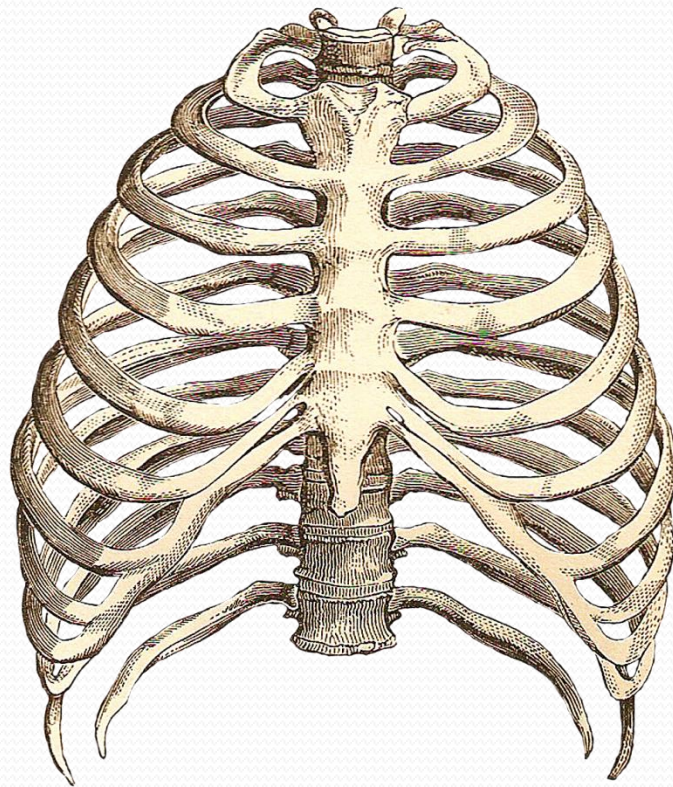
- It is also called backbone as it provides support to the body.
- It runs from the base of the skull to the lower back.
- The vertebral column is made up of 33 small irregularly shaped bones joined together.
- These small bones which make up the vertebral column are called vertebrae.
- The vertebrae are arranged in the shape of 'S'. This makes the vertebral column strong and flexible.
- Each vertebra has a hole in the centre. These holes in all the vertebrae are placed one below the other to form a canal.
- The spinal cord runs through this canal. The vertebral column is also called spine as it encloses and protects the spinal cord.



PARTS OF AXIAL SKELETON CONTINUED..

- Sternum
- It is also known as breast bone.
- It is made of hard immovable bone present in chest .
- It is the place of attachment for the bones of rib cage.
- The 12 pairs of bones present in the chest region are called ribs.
- These 12 pairs of ribs along with sternum and the part of vertebral column attached by rib bones form rib cage.

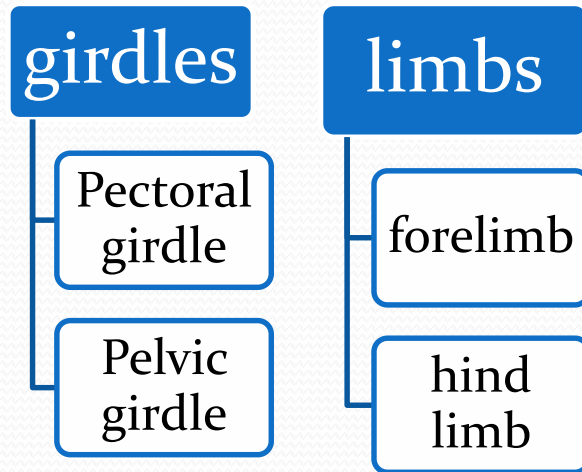
Ribcage



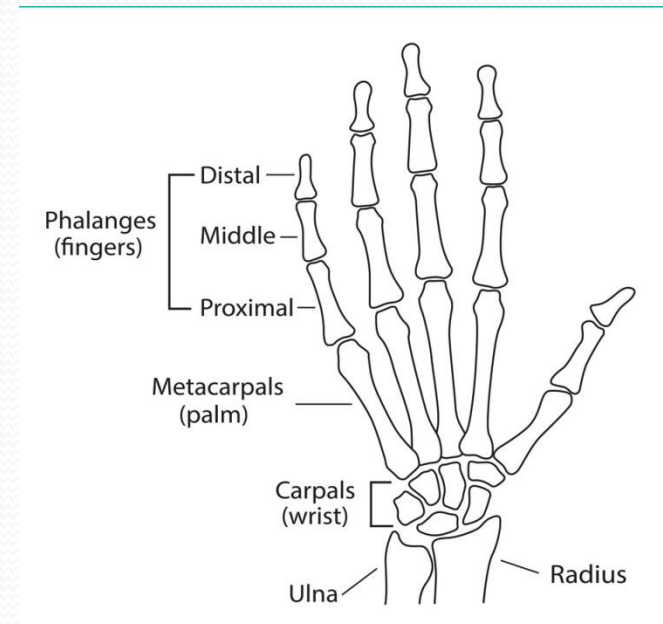
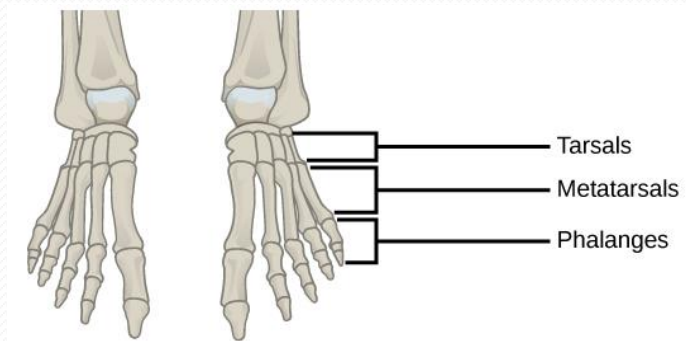
- The ribcage provide protection to heart and lungs

APPENDICULAR SKELETON

- Parts of appendicular skeleton
- Girdles
- Limbs

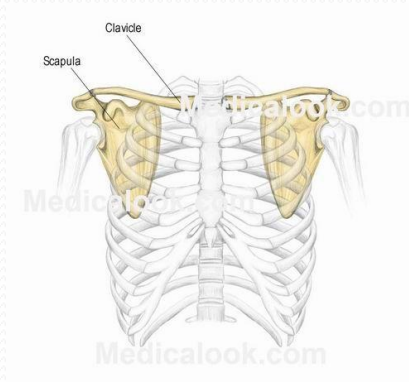


BONES OF HUMAN FEET AND HAND(LIMBS)

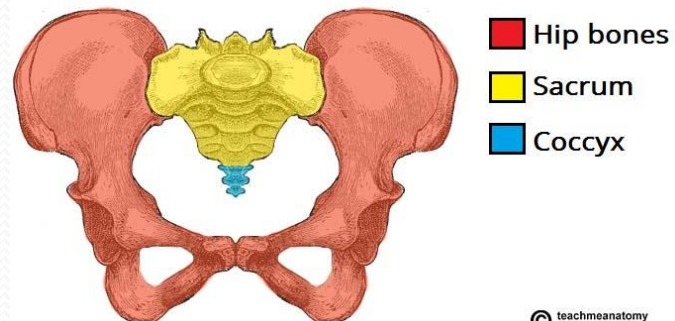


BONES OF HUMAN GIRDLES

- PECTORAL GIRDLE(SHOULDER GIRDLE)



PELVIC GIRDLE



QUESTIONS AND ANSWERS

- Write functions of skeleton
- What is the function of ribcage?
- How many pairs of ribs are there in humans?
- How many small bones are there in the backbone/vertebral column?



THANK YOU