

Class - 6

Science - Chapter – 8

**LOCOMOTION**

The ability of a human being to move its body from one place to another is called LOCOMOTION.

**TWO BODY MOVEMENTS SHOWN BY HUMAN BEINGS ARE -**

1.Movements of the body parts

2.Movements of the whole bodyfrom one place to another.

**SKELETON**

The bones in our body make up a framework called SKELETON

OR

The bony framework inside our body is called SKELETON

The skeleton of an adult human being is made of 206 bones.

It consists of : skull , backbones , ribs, breast bones,hip bones, arm bones,leg bones.

**FUNCTIONS OF SKELETON**

1.It holds the whole body together and gives it a shape.

2.It protects many delicate organs of the body like brain , heart, lungs, liver spinal chord.

3.It helps in the movement of body parts and locomotion.

4. It provides numerous points for the attachment of muscles of the body.

**SKULL**

It is a bony structure that surrounds and protect the brain.It is made of 22 bony plates.

It also protects the main sense organs like eyes,ears,nose.

It gives shape to our head.

**BACKBONE**

It is a long hollow. rod like structure running from the neck to the hips, inside our body.

It is also called vertebral column

It is made up of 33 small bones , these small bones r called vertebrae.

**FUNCTIONS OF BACKBONE**

1. It provide main support to the body.

2. It supports the head at its top.

3. It attaches shoulder bones,ribs, hip bones.

4.It protects the spinal chord.

**RIB CAGE**

Ribs r the curved bones in our chest.The hollow bony structure formed by the ribs is called RIB CAGE.

**FUNCTIONS OF RIB CAGE**

1. It protects the internal organs of the body like heart,lungs,liver.

2. It takes part in our breathing movements.

**SHOULDER BONES**

1.Arms r attached to the shoulder bones

2.The two shoulder bones r -collar bone and shoulder balde

**FUNCTIONS OF THE SHOULDER BONES**

1.Collar bones on the two sides of the neck keeps our shoulders apart.

2.Shoulder balde attach the arms o the body.

3.It provides sites for muscle attachment which move the arms,neck,upper part of the body.

**HIP BONE**

It is at the lower end of the backbone, to which the legs r attached.

**FUNCTIONS**

1.It supports and protects the lower organ of the body like intestines ,urinary bladder,internal sex organs.

2.It attachees the legs to our body.

**BONES OF THE HAND**

1.It is made of three parts : wrist,palm,finger

**CARTILAGE**

It is a firm but flexible material. It is much softer than bone.

It can b found in the pinnae of ears,at the end of the nose,between the vertebrae of backbone.

It gives support and shape to the ear and nose

It reduses friction and allows the end of the bones to move easily over each other without damaging them.

**JOINTS**

Places where two bones join together r called JOINTS . It helps in body movement.

**LIGAMENTS**

In a freely movable joints the ends of bones forming the joints are held in place by strong connective tissue called LIGAMENTS.

**TYPES OF JOINTS**

1.HINGE JOINT

It allows movement of bones in only one direction: forward and backward

It is present in elbow,knee,knuckles,jaw

2.BALL AND SOCKET JOINTS

In it one end of the bone has a round shape like ball which fits into socket in the other bone.

It is present in shoulderjoints,hip joints

3.PIVOT JOINTS

It allows rotation around an axis.

It exist in skull and neck.

4.FIXED JOINTS

In some joints bones areheld so tightly together that they can not move at all.such joints are called fixed joints.

It occurs in skull

**MUSCLES**

It is fibrous tissue in the body that has an ability to contract. they are attached to the bones of our skeleton.

When the muscles is attached to a bone contracts,it pulls the bone due to which the bones move at the joint.

**MOVEMENTS IN ANIMALS**

COCKROACH

The skeleton of cockroach is called exoskeleton as it is outside the body.

It moves on the ground as well as flies.

BIRDS

They walk on the ground by using their hind limbs

They can fly by flappinf their wings.

ANIMALS THAT MOVE WITHOUT LEGS

1. EARTHWORMS

It moves by lengthning n shotening its body alternatively

2. SNAIL

It moves with the help of a large ,disc shaped muscular foot.

3. FISH

It swims in water as its body shape is streamlined.It swims in water by moving its tail from side to side.

4. SNAKE

It moves forward by moving its body sidewaysin form of many loops pushing against the ground.