# CBSE Notes

# Chapter VIII

# **Body movement**

#### **Human skeleton:**

- The human skeleton and skeletal system is made up of 206 bone.
- The bone of our body act as framework or give it shape.
- The bone are also protect internal organ.

### Parts of human skeleton

#### **Skull:**

- The bones of skull is hardest of all the bones.
- Skull bones protect our brain and rest of the facial bone give shape and frame to our face.

## The spine:

- The spine also called vertebral column or back bone.
- It consists 33 small bone.
- It start from the neck down to the tail bone or hip region.

### The rib cage:

- Joint the chest bone and back bone together to form cage.
- It protects our internal chest region organ lung, heart.

### **Collar bone:**

- Collar bone are either side of the neck.
- The collar bone is attached to the shoulder blade and breastbone.
- It give shape to the shoulder and help in movement of arm.

#### Fore arm:

- The arm has two part the upper arm and fore arm joint at the elbow.
- One long bone run through upper arm, and it give shape to the fore arm.

## The hip bone:

- The hip bone is form by three bone fused together, two hip bone is joint with vertebrae in hip region.
- The hip bone and vertebrae joined to form the pelvic girdle.

#### **Joints:**

The place where two or more bone meet in the skeleton . We can move or bend only at those points.

- Ligament connect the bone forming the joint.
- The end of the bone covered with cartilage.
- A thick oily liquid present lubrication.

## **Fixed joint:**

Some joint do not allow any movement these are fixed joint.

Example: joint between teeth and jaw bone.

## Ball and socket joint:

These joint allow the greatest freedom of movement or are the most Mobile.

Example: hip and shoulders joint.

## **Pivotal joint:**

A cylindrical bone turn in a ring type bone . Full rotation not possible.

Example: neck attached to the head help in side way back and fourth movement.

## **Hing joint:**

Link door hing, only back and forth movement possible.

Example: ankle, elbow, knee.

#### **Movement:**

• Most animals move from one place to another place.

- This type of movement is called locomotion.
- We use our legs for locomotion.
- Animals that have vertebral column are called vertebrates.
- All vertebrates move with the help of bone and muscle.

#### Snake:

- Snake can move very fast due to flexibility of their back bone.
- Snake vertebrates column is made up of 100-400 vertebrae that are connected to ball and socket joint.

#### Fish:

- The head and tail of the fish is smaller then the middle portion, this type of the body is called as streamlined.
- The shape is such that water can flow around it easily and allow the fish to move easily.
- The skeleton of dish is covered with very strong muscles.

#### Birds:

- A smooth streamlined body, offer little resistance to the flow of air .
- A skeleton made up of Hallow bones make birds light so it can hold body up in the air .
- Big strong flight muscles attached to the wings, helps it flaps it's wings.

## **Invertebrates move:**

Most of the animals are invertebrates , they do not have vertebral column or internal skeleton made of bones.

#### **Insect:**

- Insect have hard covering over their body, or an exoskeleton.
- When insect walk three legs two on side and one on the other, support the body while the other three move the body forward.
- Most of the insect can fly with the help of two pairs of wings

#### Snail:

- Snails have soft body which they can pull back into their heavy shell.
- They have large flat foot which secret slimysubstance, with the help they move forward.
- The movement of the foot is contracted by muscle attached to it.

## **Earthworm:**

- The body of earthworm is made up of many rings joined end to end.
- An earthworm does not have bones.
- Movement of Earthworm is first extend to front part blog the body keeping their half portion fixed to the ground.