

Chapter 8 Body movements

Extra questions

How does the snake move?

Ans: Snakes have a long backbone and many thin muscles which help in the movement. The snake's body curves into many loops. Each loop of the snake gives it a forward push by pressing against the ground.

How is a bird's body adapted for flying?

Ans: Most birds can fly in the air and walk on the ground. Some birds like ducks and swans can swim in water, Birds possess a number of features which help them to fly. These features are

- They have streamlined bodies which makes it easier for them to move in air.
- Bones are hollow and light which makes their body light.
- They have wings with feathers. Flapping of wings provides both thrust and lift in the air.
- Strong breast muscles help in flapping of wings during flight

How does fish move in water?

Ans: The body of fish is streamlined. The streamlined shape helps the fish to move in water. The skeleton of fish is covered with muscles which make the front part of the body to curve to one side and the tail part swings towards the opposite side. This makes a jerk and pushes the body forward. In this way it moves in water.

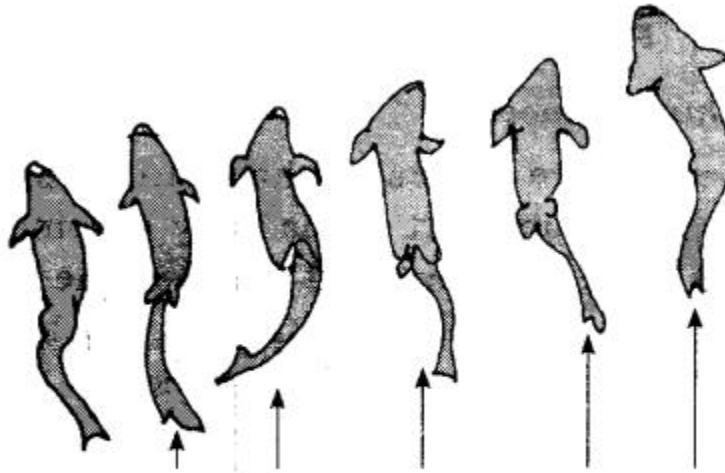


Fig. 8.14 Movement in fish

Explain various kinds of joints found in our body and give two examples of each.

Ans: There are four types of joints in our body:

(i) **Fixed joints:** These joints do not allow any movement .

Examples:

- Joints between the bones of the skull
- Joint between the upper jaw and the rest of the head

(ii) **Ball and socket joint:** : In this joint, the ball like end of one bone fits into a cup like cavity (socket) of the other bone. This allows movement in all directions.

Examples:

- joint in the shoulder
- Joint at the hip

(iii) **Pivotal joint:** pivot joint allows rotation only. In this joint the rounded surface of one bone fits into a ring formed by the other bone so that one bone is able to rotate over the other in a ring.

Example:

joint between the neck and the head

(iv) **Hinge joint:** This joint allows movement in one direction only, similar to the hinges of the door.

Examples:

- Elbow joint between upper and the lower arm.
- Knee joint between the thigh and the lower leg.

What are the main functions of human skeleton?

Answer :- Besides helping in movement, the skeletal system performs the following jobs or functions:

- It provides shape to the body.
- It provides a framework which supports the body and keeps it upright.
- It protects the soft internal organs like the heart, stomach and liver.
- Blood cells are made in the soft substance (bone marrow) present in the bones which form the skeleton.

Describe the human skeleton

Answer:- Different parts of the human skeleton are

1. Skull The skull protects the brain from injury. All bones in the skull are fixed, except the lower jaw. The lower jaw can move. Its movement allows us to talk and chew food.

2. Rib cage The rib cage provides protection to heart and lungs. Human beings have 12 pairs of ribs. You can feel your ribs by running your fingers across your chest.

3. Backbone The backbone is made up of 33 small bones called vertebrae. It surrounds and protects the spinal cord.

4. Limbs We have two pairs of limbs. The hind limbs (legs) are used for walking. The forelimbs (arms) allow us to do a variety of tasks such as lifting and using objects.

How do the muscles work?

Ans: The muscles work in pairs. When one of them contracts, the bone is pulled in that direction, the other muscle of the pair relaxes. To move the bone in the opposite direction, the relaxed muscle contracts to pull the bone towards its original position, while the first relaxes. A muscle can only pull. It cannot push.

