

walk and fly.

□ Snails move with the help of a muscular foot.

Textbook Exercise

1. Fill in the blanks :

(a) Joint of the bones help in the of the body.

b) A combination of bones and cartilages forms the of the body.

(c) The bones at the elbow are joined by a joint.

(d) The contraction of the pulls the bones during movement.

Ans. (a) Joint of the bones help in the movement of the body.

- (b) A combination of bones and cartilages forms the **skeleton/framework** of the body.
 (c) The bones at the elbow are joined by a **hinge joint**.
 (d) The contraction of the **muscles** pulls the bones during movement.

2. Indicate true (T) and false (F) among the following sentences :

- (a) The movement and locomotion of all animals is exactly the same.
 (b) The cartilage are harder than bones.
 (c) The finger bones do not have joints.
 (d) the forearm has two bones.
 (e) Cockroaches have an outer skeleton.

Ans. (a)—(F), (b)—(F), (c)—(F), (d)—(T), (e)—(T).

3. Match the items given in Column A with one or more items of Column B.

Column-A	Column-B
Upper jaw	have fins on the body
Fish	has an outer skeleton
Ribs	can fly in the air
Snail	is an immovable joint
Cockroach	protect the heart
	shows very slow movement
	have a streamlined body

Ans.

Column-A	Column-B
Upper jaw	is an immovable joint
Fish	have a streamlined body.
	have fins on the body.
Ribs	protect the heart
Snail	shows very slow movement
	has an outer skeleton
Cockroach	has an outer skeleton
	can fly in the air

Fish : You will study in higher classes that fish have an outer skeleton also made of scales, in addition to internal skeleton of bones/cartilage.

In **snail** the outer skeleton is made of a shell of calcium carbonate.

4. Answer the following :

- (a) What is a ball and socket joint?
 (b) Which of the skull bones are movable?
 (c) Why can our elbow not move backwards?

Ans. (a) **Ball and socket joint** : This is a type of freely movable joint. In this joint a ball shaped or rounded head/end of one bone fits into a cavity (hollow space) of the other bone. Such a joint allows movements in all the directions. Examples of ball and socket joints are joint between head of upper arm bone and shoulder bone.

(b) Lower jaw bones are movable.

(c) Our elbow has a hinge joint. It allows movement only in one direction like a hinge of a door. That is why elbow cannot move backwards.

Intext Questions (Paheli Boojho)

1. Boojho wonders about movements in plants. He knows they do not move from place to place, but do they show any other kind of movement?

Ans. Yes, parts of plant show various types of movements. Some examples are :

- ◆ Folding of leaves of sensitive plant (Mimosa) on touching.
- ◆ Opening and closing of flowers.
- ◆ Turning of sunflowers in the direction of sun.
- ◆ Bending of stem towards source of light.

Exercise

(Based on Student Advisor Textbook)

A. Multiple Choice Questions

1. Which of the following is made up of vertebrae?

- (a) Backbone (b) Cartilage
 (c) Sternum (d) None of these

2. The lungs and heart are protected by :

- (a) pelvic girdle (b) rib cage
 (c) elbow (d) femur

3. Muscles are attached to the bones by :

- (a) ligaments (b) cartilages
 (c) tendons (d) None of these

4. The joint which allows movement in one direction only is a :

- (a) ball and socket joint
 (b) pivot joint
 (c) hinge joint
 (d) slightly moveable joint

5. Earthworm moves by means of :

- (a) fins
 (b) circular and longitudinal muscles