

Living Organisms, Body Movements and Habitat

Science · Class 6 · Topic-wise Practice Worksheet

TIME 45 minutes	QUESTIONS 18	TOTAL MARKS 24	MAX. SCORE ___ / 24
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Name: _____ Class/Sec: _____ Date: _____

INSTRUCTIONS

- There are **18 questions** in this worksheet. All questions are compulsory.
- Each question has four options (A), (B), (C) and (D). Exactly **one** option is correct.
- Questions 1–15 carry **1 mark** each. Questions 16–18 (Achievers Section) carry **3 marks** each.
- There is no negative marking. Study every diagram and table carefully.

Section A — Scientific Reasoning

Q1–Q8 · 1 mark each

- The surroundings in which an organism lives is called its _____.
 (A) Habitat (B) Adaptation
 (C) Population (D) Community
- The non-living components of a habitat, such as air, water, soil and light, are called _____ components.
 (A) Biotic (B) Abiotic
 (C) Organic (D) Cellular
- Which joint allows movement in only one plane, like the hinge of a door?
 (A) Hinge (B) Ball and socket
 (C) Pivot (D) Fixed
- The joint that allows the head to turn from side to side is a _____ joint.
 (A) Hinge (B) Pivot
 (C) Ball and socket (D) Fixed
- Earthworms move with the help of _____.
 (A) Legs (B) Fins
 (C) Muscles and tiny bristles called setae (D) Wings
- A snail moves using its _____.
 (A) Setae (B) Fins
 (C) Wings (D) Muscular foot
- Fish have a streamlined body. This mainly helps them to _____.
 (A) Move easily through water with least resistance (B) Stay warm
 (C) Breathe air (D) See better
- Which of these is **not** a characteristic of living things?
 (A) They grow (B) They always move from place to place
 (C) They reproduce (D) They respond to stimuli

9. In the table below, which row is **incorrectly** matched?

Row	Habitat	Adaptation of the organism
(A)	Desert	Long roots and reduced leaves
(B)	Polar region	Thick fur and a layer of blubber
(C)	Pond	Streamlined body and gills
(D)	Mountain	Broad flat leaves to hold snow

Table 9.1 — Habitats and adaptations

- (A) Row (A) (B) Row (B)
(C) Row (C) (D) Row (D)
10. A camel can survive many days in the desert without water. Which adaptation is **least** responsible for this?
(A) It passes very little urine (B) It stores fat in its hump
(C) It has long eyelashes (D) It hardly sweats
11. Which of these shows that plants respond to stimuli?
(A) A plant grows taller each year (B) A plant has green leaves
(C) A plant needs water (D) A shoot bends towards the light coming from a window
12. Cactus and camel both live in the desert. Which problem do **both** have to solve?
(A) Conserving water in a hot dry climate (B) Too little light
(C) Too much rain (D) Freezing temperatures
13. Why can a bone not bend, while your arm can?
(A) Bones are soft in the middle (B) Bones are rigid, so movement happens only at the joints where two bones meet
(C) Bones stretch when pulled (D) Muscles make bones bend
14. A snake has no legs, yet it moves quickly. How?
(A) It rolls along the ground (B) It uses its tongue to pull itself
(C) Its body curves into loops and its strong muscles push against the ground (D) It floats on air
15. In the pond ecosystem, the frog is both a predator and a prey. Which statement explains this best?
(A) It lays many eggs (B) It lives both in water and on land
(C) It has both gills and lungs during its life (D) It eats insects and is eaten by snakes

Achievers Section

Q16–Q18 · 3 marks each

16. Consider the following statements.
(i) All living things need to respire.
(ii) Adaptation happens within the lifetime of a single individual whenever it needs it.
(iii) A cactus stem carries out photosynthesis.
Which of the statements is/are correct?
- (A) (i) and (ii) only (B) (ii) and (iii) only
(C) (i) and (iii) only (D) All three

17. Fish and whales both live in the sea and look broadly similar in shape. Yet a whale must come to the surface regularly while a fish need not. Why?

- (A) A whale breathes air with lungs, while a fish takes dissolved oxygen through gills
(B) The whale is heavier
(C) The whale cannot swim deep
(D) A fish does not need oxygen

18. Match each organism in Column I with the way it moves, given in Column II.

Column I	Column II
(P) Earthworm	(1) Muscular foot
(Q) Snail	(2) Fins and streamlined body
(R) Fish	(3) Setae and body muscles
(S) Bird	(4) Wings and hollow bones

Table 18.1

- (A) P-1, Q-3, R-4, S-2
(B) P-3, Q-1, R-2, S-4
(C) P-3, Q-2, R-1, S-4
(D) P-4, Q-1, R-2, S-3

Answer Key

1	A	2	B	3	A	4	B	5	C
6	D	7	A	8	B	9	D	10	C
11	D	12	A	13	B	14	C	15	D
16	C	17	A	18	B				

Solutions

1. Answer: (A) Habitat

A **habitat** is the place where an organism lives and finds food, water, shelter and a mate. Adaptation is the feature that makes it fit for that habitat.

2. Answer: (B) Abiotic

Abiotic components are the non-living parts of a habitat. The living parts — plants, animals and microbes — are the biotic components.

3. Answer: (A) Hinge

A **hinge** joint bends and straightens in one plane only. The elbow and the knee are hinge joints.

4. Answer: (B) Pivot

A **pivot** joint between the skull and the top of the backbone lets the head rotate from side to side.

5. Answer: (C) Muscles and tiny bristles called setae

An earthworm has no bones or legs. It moves by alternately lengthening and shortening its body with **muscles**, gripping the soil with tiny bristles called **setae**.

6. Answer: (D) Muscular foot

A snail glides on a thick **muscular foot**, which produces waves of movement along its underside. The shell is carried on its back.

7. Answer: (A) Move easily through water with least resistance

A streamlined body is broad in the middle and tapering at both ends, so water flows smoothly around it. This lets the fish **move easily through water with least resistance**.

8. Answer: (B) They always move from place to place

Movement from place to place is not universal — plants are living but stay rooted in one spot, though they do show movement of parts. Growth, response to stimuli and reproduction are all true of every living thing.

9. Answer: (D) Row (D)

Mountain trees are usually **cone-shaped with sloping branches and needle-like leaves**, so that snow slides off instead of collecting and breaking the branches. Broad flat leaves that hold snow would be a disadvantage. The other three rows are correct.

10. Answer: (C) It has long eyelashes

Long eyelashes keep **sand** out of the eyes — useful in a desert, but nothing to do with saving water. Passing little urine, sweating hardly at all and breaking down the hump's fat for energy and water are all directly about water conservation.

11. Answer: (D) A shoot bends towards the light coming from a window

Responding to a stimulus means reacting to a change in the surroundings. **A shoot bending towards light** is a clear response, called phototropism. Growth and the need for water are separate life processes.

12. Answer: (A) Conserving water in a hot dry climate

The defining challenge of a desert is the shortage of water and the intense heat, so both must **conserve water in a hot dry climate**. The cactus does it with spines and a waxy stem, the camel with very little sweating and urine.

13. Answer: (B) Bones are rigid, so movement happens only at the joints where two bones meet

A bone is hard and rigid and cannot bend without breaking. **Movement happens only at the joints**, where two bones meet and muscles pull them into a new position.

14. Answer: (C) Its body curves into loops and its strong muscles push against the ground

A snake's long backbone carries many small vertebrae and strong muscles. **The body curves into loops and the muscles push those loops against the ground**, driving the snake forward.

15. Answer: (D) It eats insects and is eaten by snakes

A predator hunts other animals and a prey is hunted. The frog **eats insects** (so it is a predator) and **is eaten by snakes and birds** (so it is prey). Living in two habitats and changing its breathing organs are true but are about adaptation, not feeding relationships.

16. Answer: (C) (i) and (iii) only

Statement (i) is true — every living thing releases energy from food by respiration. Statement (ii) is false; adaptations develop slowly over many generations, not within one animal's lifetime because it wants them. Statement (iii) is true; the cactus's green stem takes over food-making since the leaves are reduced to spines. Hence **(i) and (iii)**.

17. Answer: (A) A whale breathes air with lungs, while a fish takes dissolved oxygen through gills

Both have streamlined bodies because both must move through water — the same problem produces a similar shape. But **a whale is a mammal that breathes air with lungs**, so it must surface, whereas **a fish takes dissolved oxygen from the water through gills** and can stay under.

18. Answer: (B) P-3, Q-1, R-2, S-4

An earthworm grips the soil with **setae and body muscles** (3). A snail glides on a **muscular foot** (1). A fish uses **fins and a streamlined body** (2). A bird flies with **wings and hollow bones** (4). Hence P-3, Q-1, R-2, S-4.