

Animals — Adaptation and Life Cycles

Science · Class 4 · Topic-wise Practice Worksheet

TIME 40 minutes	QUESTIONS 15	TOTAL MARKS 21	MAX. SCORE ___ / 21
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Name: _____ Class/Sec: _____ Date: _____

INSTRUCTIONS

- There are **15 questions** in this worksheet. All questions are compulsory.
- Each question has four options (A), (B), (C) and (D). Exactly **one** option is correct.
- Questions 1–12 carry **1 mark** each. Questions 13–15 (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 complete change of form from a caterpillar into a butterfly is called _____.
 (A) Metamorphosis (B) Migration
 (C) Hibernation (D) Camouflage
- Which of these animals is an amphibian?
 (A) Whale (B) Penguin
 (C) Crocodile (D) Frog
- Which of these is an egg-laying mammal?
 (A) Platypus (B) Bat
 (C) Kangaroo (D) Dolphin
- A camel's hump mainly stores _____.
 (A) Water (B) Fat
 (C) Blood (D) Air
- Birds have hollow bones. How does this help them?
 (A) It keeps them warm (B) It stores food
 (C) It helps them swim (D) It makes their bodies light for flight
- Animals that are active at night are called _____.
 (A) Nocturnal (B) Diurnal
 (C) Aquatic (D) Domestic
- The long winter sleep of some animals is called _____.
 (A) Aestivation (B) Hibernation
 (C) Migration (D) Metamorphosis
- Which body covering protects a fish?
 (A) Feathers (B) Fur
 (C) Scales (D) Shell

9. The diagram shows the life cycle of a butterfly. At which labelled stage does the insect stay inside a hard case without feeding?

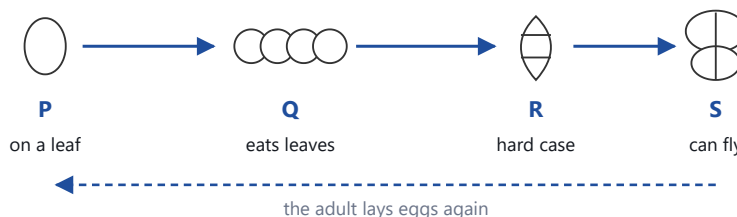


Fig. 9.1 — Life cycle of a butterfly

- (A) P
(B) Q
(C) R
(D) S
10. In the table below, which row is **incorrectly** matched?

Row	Animal	Adaptation
(A)	Duck	Webbed feet for swimming
(B)	Eagle	Sharp claws for gripping prey
(C)	Fish	Lungs for breathing under water
(D)	Polar bear	Thick fur to keep warm

Table 10.1 — Animals and their adaptations

- (A) Row (A)
(B) Row (B)
(C) Row (C)
(D) Row (D)
11. A chameleon changes its colour to match the leaves around it. The main advantage of this is that it can _____.
- (A) Move much faster
(B) Breathe more easily
(C) Keep its body warm
(D) Hide from enemies and surprise its prey
12. A scientist finds a skull with long pointed canine teeth and sharp cutting molars. What did the animal most probably eat?
- (A) Flesh
(B) Grass
(C) Fruits
(D) Nectar

Achievers Section

Q13–Q15 · 3 marks each

13. Consider the following statements.
- (i) All animals that live in water breathe through gills.
 - (ii) A tadpole has a tail but an adult frog does not.
 - (iii) Migration is a long seasonal journey to find better weather and food.
- 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

14. In a pond the food chain is **algae** → **small fish** → **big fish** → **kingfisher**. Fertiliser washes into the pond and the algae grow enormously. What is the most likely **immediate** effect?

(A) The kingfishers will start eating algae

(B) The number of small fish will rise, as they have more food

(C) The number of small fish will fall at once

(D) The big fish will begin to make their own food

15. Match each animal in Column I with its correct adaptation in Column II.

Column I	Column II
(P) Fish	(1) Hollow bones
(Q) Eagle	(2) Streamlined body
(R) Desert rat	(3) Long sticky tongue
(S) Frog	(4) Comes out only at night

Table 15.1

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

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

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

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

Answer Key

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

Solutions

1. Answer: (A) Metamorphosis

Metamorphosis is a complete change of body form during the life cycle. It happens in butterflies, frogs and mosquitoes.

2. Answer: (D) Frog

An amphibian can live both in water and on land. A **frog** begins as a tadpole in water and later lives on land. Whales are mammals, crocodiles are reptiles and penguins are birds.

3. Answer: (A) Platypus

Almost every mammal gives birth to live young, but the **platypus** and the spiny anteater lay eggs. They are still mammals because they have hair and feed their young on milk.

4. Answer: (B) Fat

The hump stores **fat**, not water. When food and water are scarce, this fat is broken down to release energy and some water.

5. Answer: (D) It makes their bodies light for flight

Air-filled hollow bones weigh very little, so they **make the bird's body light for flight** without making the skeleton weak.

6. Answer: (A) Nocturnal

Nocturnal animals such as owls, bats and cats are active at night. They usually have large eyes and very sharp hearing.

7. Answer: (B) Hibernation

Hibernation is a deep winter sleep in which the body slows right down, so the animal uses very little energy while food is scarce. Aestivation is the same thing in summer.

8. Answer: (C) Scales

Fish have overlapping **scales** that protect the body and help it slip smoothly through water.

9. Answer: (C) R

The order is egg (P) → larva or caterpillar (Q) → pupa (R) → adult butterfly (S). Stage **R** is the pupa, drawn as a hard closed case in which the insect rests without eating while its body is rebuilt.

10. Answer: (C) Row (C)

A fish breathes with **gills**, not lungs. Gills take in the oxygen dissolved in the water. The other three rows are correct.

11. Answer: (D) Hide from enemies and surprise its prey

This is camouflage, and it works both ways — the chameleon becomes hard for predators to spot, and insects do not notice it until it is close enough to catch them. So it can **hide from enemies and surprise its prey**.

12. Answer: (A) Flesh

Long pointed canines grip and tear, and sharp molars slice. These are the teeth of a carnivore, so the animal ate **flesh**. A grass eater would have broad flat teeth for grinding.

13. Answer: (B) (ii) and (iii) only

Statement (i) is false — whales, dolphins and turtles live in water but breathe air with lungs. Statement (ii) is true; the tail is absorbed during metamorphosis. Statement (iii) is true; the Siberian crane, for example, flies to India every winter. Hence **(ii) and (iii)**.

14. Answer: (B) The number of small fish will rise, as they have more food

Small fish feed directly on algae, so more algae means more food and **their number rises first**. Only later, as the extra algae die and rot, does the pond lose oxygen and the fish suffer. A kingfisher cannot digest algae, and no animal can make its own food.

15. Answer: (C) P-2, Q-1, R-4, S-3

A fish has a **streamlined body** (2) that cuts through water with least resistance. An eagle has **hollow bones** (1) that reduce its weight for flying. A desert rat escapes the fierce daytime heat by **coming out only at night** (4). A frog shoots out a **long sticky tongue** (3) to catch insects. Hence P-2, Q-1, R-4, S-3.