

WORKSHEETS

1. Green Plants – The Food Producers

A. Answer the following questions.

1. Why are only green plants able to produce their own food?
2. Why are leaves called the food factory of a plant?
3. Define photosynthesis.
4. How do non-green plants obtain their food?
5. In what ways plants, human beings and animals depend on each other?

B. State whether the following statements are True or False.

1. Plants breathe through chlorophyll. _____
2. Food is stored in plants in the form of starch. _____
3. If we put a few drops of iodine on a dry leaf, it turns blue-black in colour. _____
4. Mushrooms have variegated leaves. _____
5. Plants and animals are dependent on each other. _____

C. Fill in the blanks.

1. Plants breathe through tiny openings called _____.
2. _____ traps the sunlight used for preparation of food.
3. The food prepared by a leaf is called _____.
4. Apart from food, _____ is also given out by plants during photosynthesis.
5. Plants give _____, _____ and oxygen to human beings.

D. Match the following.

Column A

1. Tiny openings in leaves
2. Variegated leaves
3. Non-green plant
4. Food prepared by plant
5. Stored food in leaves
6. Green pigment in leaves

Column B

- (a) Moulds
- (b) Sugar
- (c) Starch
- (d) Chlorophyll
- (e) Croton plant
- (f) Stomata

ANSWERS

- A.**
1. Green plants are able to produce their own food because of the presence of a substance called chlorophyll in their leaves.
 2. Leaves are called the food factory of a plant because they prepare food for the plant in the presence of chlorophyll using sunlight, water and carbon dioxide.
 3. The process of making food by plants using sunlight, water and carbon dioxide in the presence of chlorophyll is known as photosynthesis.
 4. Non-green plants obtain their food from dead and decaying plants and animals.
 5. Plants give food, shelter and oxygen to human beings and animals. In turn, human beings and animals give out carbon dioxide which is used by plants to carry out photosynthesis. This is how plants, human beings and animals depend on each other.
- B.**
1. False
 2. True
 3. False
 4. False
 5. True
- C.**
1. stomata
 2. Chlorophyll
 3. sugar
 4. oxygen
 5. food, shelter
- D.**
1. (f)
 2. (e)
 3. (a)
 4. (b)
 5. (c)
 6. (d)
- E.**
1. (b)
 2. (a)
 3. (b)
 4. (d)
 5. (a)

2. Adaptations for Survival in Plants

A. Answer the following questions.

1. Why do plants develop adaptations?
2. What is a habitat? Name the two types of habitats of plants.
3. What are the adaptations of the plants that grow in the following regions?
(a) Plains (b) Hills (c) Coastal areas
4. What are fixed plants? What are the adaptations found in these plants?
5. What are insectivorous plants?

B. State whether the following statements are True or False.

1. Mango is a terrestrial plant. _____
2. Plants growing in plains are adapted to survive with least amount of water. _____
3. Water lily is an underwater plant. _____
4. Mushrooms make their food through photosynthesis. _____
5. Plants growing in coastal areas do not shed their leaves throughout the year. _____

C. Fill in the blanks.

1. Plants that grow in water are called _____ plants.
2. Plants that are adapted to grow in _____ have long root system that go deep into the ground.
3. Pine tree has _____ and _____ leaves.
4. In floating plants, _____ is present in the upper surface of the leaves.
5. There is no _____ in the leaves of underwater plants.

D. Give one word/a few words answer for the following.

1. The region where a living thing lives or grows naturally
2. Plants that grow on land

3. Plants that are not fixed at the bottom of the water body and have a fibrous root system
4. Plants completely submerged in water
5. Plants with leaves modified to capture insects

E. Match the following.

Column A

1. Cedar
2. Teak
3. Mangrove tree
4. Date palm
5. Sheesham

Column B

- (a) Plains
- (b) Deserts
- (c) Hills
- (d) Marshy places
- (e) Coastal areas

ANSWERS

- A.**
1. Plants develop adaptations in order to survive in different places.
 2. The region where a living thing lives or grows naturally is called its habitat. The two types of habitats of plants are terrestrial and aquatic.
 3. (a) Trees growing in plains have many branches. These trees shed their leaves in autumn and bear leaves in spring.
(b) Trees growing in hills are tall, straight and conical to allow snow to slide down easily. Their leaves are waxy and needle-like, so that they lose minimum amount of water and shed snow without difficulty.
(c) Trees growing in coastal areas are adapted to grow in the presence of salty water. They have plenty of leaves and do not shed their leaves throughout the year.
 4. Those plants whose roots are fixed to the bottom of the pond are called fixed plants. Their stems are long, hollow, light and flexible so that they can bend easily with the waves of water and do not get uprooted. Their leaves float on the surface of the water body.
 5. Plants which eat insects are called insectivorous plants. Venus flytrap, sundew and pitcher plant are some of the examples of insectivorous plants.
- B.**
1. True
 2. False
 3. False
 4. False
 5. True
- C.**
1. aquatic
 2. deserts
 3. waxy, needle-like
 4. chlorophyll
 5. stomata
- D.**
1. Habitat
 2. Terrestrial plants
 3. Floating plants
 4. Underwater plants
 5. Insectivorous plants
- E.**
1. (c)
 2. (e)
 3. (d)
 4. (b)
 5. (a)

3. Reproduction in Animals

A. Answer the following questions.

1. What is reproduction?
2. Define mammals. Give examples.
3. Write some features of mammals.
4. What are the different stages of development in amphibians?
5. Discuss the life cycle of a housefly.
6. How do reptiles reproduce?

B. State whether the following statements are True or False.

1. Birds that lay eggs are called mammals. _____
2. Mammals are warm-blooded animals. _____
3. The yellow coloured middle part of the egg is called albumen. _____
4. Cockroaches have four stages of development. _____
5. A tadpole breathes through gills. _____
6. A larva is called caterpillar in case of a butterfly. _____

C. Fill in the blanks.

1. Mammals have a highly developed _____.
2. Inside the yolk lies an _____ which later develops into a chick.
3. Frogs lay their eggs in large clusters called _____ in water.
4. The process of change of a tadpole into an adult is called _____.
5. The albumen is rich in _____.

D. Give one word/a few words answer for the following.

1. Animals that maintain constant body temperature despite changing climatic conditions
2. An organism at any time before hatching or birth
3. An animal which is capable of living both on land and in water
4. Larva of a housefly
5. Animals that give birth to their young ones

E. Match the following.

Column A

1. Seal
2. Spiny anteater
3. Fish
4. Cockroach
5. Butterfly

Column B

- (a) Aquatic animal
- (b) Caterpillar
- (c) Egg-laying mammal
- (d) Mammal
- (e) Nymph

ANSWERS

- A.**
1. The process by which living things produce their offspring is known as reproduction.
 2. Animals that give birth to their young ones are called mammals. Human beings, cows and sheep are some of the mammals.
 3. Mammals have the following features:
 - They have a highly developed brain.
 - Their bodies are covered with hair or fur to keep them warm.
 - They maintain constant body temperature despite changing climatic conditions.
 - Mammals have four limbs. They may have two legs and two arms or four legs or a pair of flippers and fins.
 - Mammals look after their young ones properly. They feed them with their milk. They clean them, keep them warm and protect them from enemies and climatic changes.
 4. Amphibians like frogs lay their eggs in large clusters called spawns in water. An egg develops into a fish-like tadpole or larva. A tadpole has a tail like a fish and it breathes through gills. It keeps growing and changing into a mature frog. In the process, it develops legs and small teeth, loses its gills and develops lungs for breathing. Finally, it becomes an adult frog.
 5. An egg of a housefly develops into a worm-like larva. A larva is called a maggot in case of a housefly. The maggot feeds on garbage and then crawls to a cool place. There, it transforms into a pupa. An adult housefly comes out of the pupa.
 6. Reptiles reproduce by laying their eggs in holes in the ground.
- B.** 1. False 2. True 3. False 4. False 5. True 6. True
- C.** 1. brain 2. embryo 3. spawns 4. metamorphosis 5. proteins
- D.** 1. Warm-blooded animals 2. Embryo 3. Amphibian 4. Maggot
5. Mammals
- E.** 1. (d) 2. (c) 3. (a) 4. (e) 5. (b)

4. Adaptations for Survival in Animals

A. Answer the following questions.

1. What are terrestrial animals? Give examples.
2. Write some adaptations of the terrestrial animals.
3. What is hibernation?
4. Give some adaptations of aerial animals.
5. Write a short note on camouflaging.

B. Fill in the blanks.

1. Snakes possess _____ or _____ which enable them to crawl.
2. Seals have a thick layer of fat under their skin called _____.
3. The body of aerial animals is _____ in the front and at the back and _____ in the middle.
4. Carnivores have sharp, pointed and curved front teeth called _____ for tearing the flesh.
5. _____ defends itself by mimicking a snake.
6. Aquatic animals have _____ feet which help them in swimming.

C. State whether the following statements are True or False.

1. Terrestrial animals do not have a developed nervous system. _____
2. To protect themselves from cold weather, some animals become inactive and sleep for several months. _____
3. Animals living in deserts have a thin skin with lots of hair on it. _____
4. Amphibians breathe through their moist skin when they are in water. _____
5. The hindlimbs of aerial animals are modified as wings. _____

D. Give one word/a few words answer for the following.

1. Animals that live in water
2. Animals that can fly

3. Animals that live mostly on trees
4. Animals that no longer exist
5. Animals that live either on or inside the bodies of other animals to obtain food
6. Animals that can live both on land and in water

E. Match the following.

Column A

1. Blubber
2. Hibernation
3. Moist skin
4. Camouflage
5. Incisors

Column B

- (a) Bear
- (b) Frog
- (c) Zebra
- (d) Penguin
- (e) Goat

ANSWERS

- A.**
1. Terrestrial animals are the animals that live on land. Dogs, cats, horses and lions are some examples of terrestrial animals.
 2. Terrestrial animals have the following adaptations:
 - Terrestrial animals have a well-developed nervous system and sense organs which enable them to sense changes in their surroundings.
 - Most of them have four legs which help them to walk, jump and move on land or to hunt and defend themselves. Exceptions like snakes do not have legs. They possess scales or plates which enable them to crawl.
 - They have lungs to breathe.
 - Animals living in deserts have a thick skin with very little hair on it. Their skin protects them from the burning heat of the sun. Some of these animals like camels have special organs to store water because water is not easily available in deserts.
 - Animals living in cold regions like yak and polar bears have a thick skin with fur on it to keep them warm. Some of them like penguins and seals have a thick layer of fat under their skin called blubber. This helps to keep their body warm and is used as food in winter.
 - Animals like bears and frogs become inactive and sleep for several months in cold conditions to protect themselves from cold. This is called hibernation or winter sleep.
 3. Animals like bears and frogs become inactive and sleep for several months in cold conditions to protect themselves from cold. This is called hibernation or winter sleep.
 4. Aerial animals show the following adaptations:
 - Their forelimbs are modified as wings to help them to fly. They also have feathers that keep them warm and help during flight.
 - Their body is very light as it consists of hollow bones.
 - Their body is narrow in the front and at the back and broad in the middle. This shape helps them to cut through the air and fly easily.
 5. Animals develop various features that help them to obtain food, live in their habitats and protect themselves from predators.
The body colour of animals like zebra, parakeet, chameleon and polar bear can easily blend with their surroundings. They, thus, confuse their enemies and escape from them. This is known as camouflaging.
- B.**
- | | | | |
|---------------------|------------|------------------|------------|
| 1. scales, plates | 2. blubber | 3. narrow, broad | 4. canines |
| 5. Moth caterpillar | 6. webbed | | |
- C.**
- | | | | | |
|----------|---------|----------|---------|----------|
| 1. False | 2. True | 3. False | 4. True | 5. False |
|----------|---------|----------|---------|----------|
- D.**
- | | | | | |
|--------------------|-------------------|---------------------|--|--|
| 1. Aquatic animals | 2. Aerial animals | 3. Arboreal animals | | |
| 4. Extinct animals | 5. Parasites | 6. Amphibians | | |
- E.**
- | | | | | |
|--------|--------|--------|--------|--------|
| 1. (d) | 2. (a) | 3. (b) | 4. (c) | 5. (e) |
|--------|--------|--------|--------|--------|