

Chapter- 9

Animals: Living and Surviving

STUDY NOTES

- ❖ The process of changing to suit the environment is called as **adaptation**.
- ❖ Living environment that can adapt themselves to their surroundings can survive.
- ❖ The natural home of an animal is called its habitat.

Animals are grouped according to their habitat:

- ❖ Terrestrial animals
- ❖ Aquatic animals
- ❖ Aerial animals
- ❖ Arboreal animals

TERRESTRIAL ANIMALS:

- ❖ Animals that live on land are known as terrestrial animals.
- ❖ Animals like horses, lions and camels live on land.



SOME FEATURES OF TERRESTRIAL ANIMALS:

- ❖ Such animals have legs to move and lungs to breathe.
- ❖ They have well-developed sense organs and a nervous system in order to sense the changes in the surroundings.
- ❖ Animals like snakes do not have legs.
- ❖ They have plates and scales which help them to crawl.
- ❖ Animals like Arctic foxes and Polar bears live in cold regions.
- ❖ They have fur on their bodies to keep warm.
- ❖ They have fat under the skin to be used as food in winter.

Adaptations to environment by Camel:

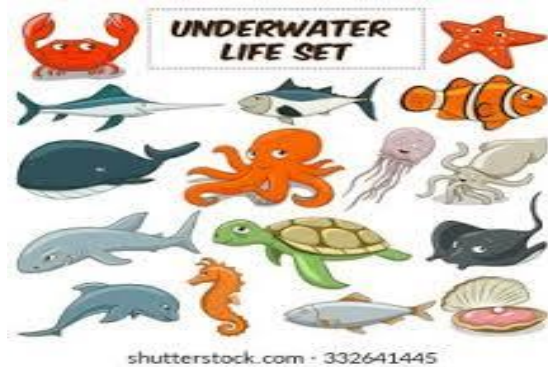
- ❖ Skin of desert animals is thick and not very hairy.
- ❖ It protects them from heat of the sun.
- ❖ **HIBERNATION:** Some animals sleep for several months to protect themselves from cold.
- ❖ For Example: Lizards and Frogs

**AQUATIC ANIMALS:**

- ❖ Animals that live in water.
- ❖ For example: fishes, snails, turtles and crabs are some aquatic animals.

FEATURES OF AQUATIC ANIMALS:

- ❖ Such animals have fins or limbs suited for swimming in water.
- ❖ The webbed feet of a duck and the paddle-like flippers of a turtle help them to push back water while swimming.

**AMPHIBIANS**

- ❖ Animals that can live both on land and in water.
- ❖ Some amphibians are frogs, toads, salamanders and newts.

FEATURES OF AMPHIBIANS:

- ❖ Amphibians have moist skin helps them to breathe in water.
- ❖ They also have lungs which helps to breathe on land also.

**AERIAL ANIMALS:**

- ❖ Animals that fly are called aerial animals.
- ❖ These animals have wings to fly.
- ❖ Most birds and insects can fly.

**FEATURES OF AERIAL ANIMALS:**

- ❖ Animals which fly has a light body because of light bones and feathers.
- ❖ The shape of body is such that it can easily cut through the air.

AEROBOREAL ANIMALS:

- ❖ Animals who spend most of their time on trees.
- ❖ For Ex: Monkeys, tree lizards, flying squirrels and opossums are some arboreal animals.

FEATURES OF AEROBOREAL ANIMALS:

- ❖ They have claws and broad hip girdles to support their body while climbing.
- ❖ Monkey has long and curly tail helps it to swing from a branch.

**ADAPTATION FOR FOOD:**

Animals eating plants and other animals can be classified into four different groups:

- ❖ Herbivores
- ❖ Carnivores
- ❖ Omnivores
- ❖ Parasite

HERBIVORES:

- ❖ Plant eating animals are called herbivores.
- ❖ Cows, goat and giraffes eat plants.
- ❖ They have sharp biting and strong teeth.
- ❖ They have long and strong legs.

CARNIVORES:

- ❖ Flesh- eating animals are called carnivores.
- ❖ Lions, tigers and dogs eat the flesh of other animals.
- ❖ They have well developed tearing teeth.
- ❖ Flesh – eating birds like eagles and vultures have sharp beaks and claws to catch other animals and to tear their flesh.

OMNIVORES:

- ❖ Animals that eat both plants and animals are called omnivores.
- ❖ Bears, crows and cockroaches are some omnivores.

PARASITES:

- ❖ Some animals live or inside the bodies of other animals for their food.
- ❖ The animals on which parasite depend for their food are called hosts.
- ❖ Mosquitoes, leeches, hookworms and bugs are parasites.
- ❖ They have suckers or sucking tubes to suck blood from their host.

ADAPTATIONS FOR PROTECTION:

- ❖ It is very important for animals to protect themselves and live long enough to reproduce.
- ❖ Fishes, houseflies and frogs move fast enough to escape from their enemies.
- ❖ Whales, elephant and hippos are too big to be eaten by other animals.
- ❖ Zebras, tigers and leopards have stripes or spots on their bodies which help them to merge or mix with their surroundings. This is called as camouflage.
- ❖ In polar regions, arctic foxes have brown coats in summer but grow white fur in winter.



- ❖ Their colour merges with their surroundings and it becomes difficult to spot them.
- ❖ Thus, they keep themselves safe from their enemies.
- ❖ Insects like the stick insects and the leaf insect look like what their names suggest! And that keeps them safe.

IMPROVE YOUR GK

- ❖ The sabre-toothed tigers lived on this earth many years ago.
- ❖ These tigers stopped existing about 10,000 years ago.
- ❖ Some say their prey disappeared while others say the climate changes were unsuitable for them so they became extinct.

TEACHER'S NOTE

- ❖ Encourage the children to watch National Geographic.
- ❖ Children will paste the pictures of different animals classifying them according to their surroundings and food habits.

LET US ANSWER

A. TICK THE CORRECT ANSWER.

1. It is a term used when an animal sleeps for several months to protect itself from cold.
 - a) Hibernation
 - b) respiration
 - c) extinction
 - d) digestion
2. The natural home of an animal is called its
 - a) Air holes
 - b) nest
 - c) habitat
 - d) water
3. Terrestrial animals breathe through
 - a) Air holes
 - b) gills
 - c) lungs
 - d) scales
4. Monkeys are called
 - a) Terrestrial animals
 - b) aerial animals
 - c) arboreal animals
 - d) aquatic animals
5. Carnivorous animals have well-developed
 - a) Biting teeth
 - b) tearing teeth
 - c) chewing teeth
 - d) grinding teeth
6. This adaptation helps animals to protect themselves.
 - a) Big nose
 - b) slow movement
 - c) small eye
 - d) camouflage
7. He is a wildlife conservationist
 - a) Sunderlal Bahuguna
 - b) Baba Amte
 - c) Steve Irwin
 - d) Sunita Williams

B. WRITE T FOR TRUE AND F FOR FALSE.

1. A snake crawls on its legs.
2. Animals that live both in water and on land area called amphibians.
3. Animals that spend most of their time on trees are called aquatic animals.
4. A giraffe is an omnivore.
5. Animals that live on or inside the body of other animals are called parasites.

C. COMPLETE THE TABLE WITH SUITABLE STATEMENTS.

	TERESSTRIAL	AQUATIC	AMPHIBIANS	AERIAL	ARBOREAL
MOVEMENT	Legs to move on land				

BREATHING ORGANS			Moist skin (to breathe in water) lungs (to breathe in land)		
EXAMPLES					

D. WRITE SHORT ANSWERS

1. What is adaptation?
2. How do animals living in cold regions keep themselves warm?
3. What are arboreal animals?
4. Why do most herbivores have long and strong legs?

E. ANSWER THESE QUESTIONS

1. The frog is an amphibian. How is it adapted to live on land and in water?
2. Why do aerial animals have light bodies?
3. What are the different ways by which animals protect themselves?
4. How do animals like fish, elephant and leaf insect protect themselves?

ODM
EDUCATIONAL GROUP

ANSWER KEY

Changing your Tomorrow

A1. Hibernation

2. habitat

3. lungs

4. arboreal

5. tearing teeth

6. camouflage

7. Steve Irwin

B1. F

2. T

3. F

4. F

5. T

C.

	TERRESTRIAL	AQUATIC	AMPHIBIANS	AERIAL	ARBOREAL
MOVEMENT	Legs to move on land	Fins and limbs suited for swimming	Limbs helps them to swim	They have wings to fly	They have claws and broad hip girdles
BREATHING ORGANS	Breathe through their lungs	Breathe through their gills	Moist skin (to breathe in water) lungs (to breathe in land)	Breathe through tubes attached to lungs	Breathe through their lungs
EXAMPLES	Camels, Bears, foxes, snakes etc	Fishes, turtles, crabs, snails etc	Frogs, toads, salamanders, newts etc	Bat, goose, kite, swallow etc	Monkey, tree lizard, squirrels etc

D1. Adaptation is a process of changing to suit the surroundings.

2. Animals living in cold area keep themselves warm as they have thick fat and fur with pointed ears and short legs to conserve the heat.

3. Arboreal animals are animals who spend most of the time on trees.

4. Most herbivores have long and short legs because they need to travel long distance in search of the food.

E1. Frog is an amphibian that can live both on land and water:

- Frog have limbs that help in swimming.
- They have moist skin that helps them to breathe in water.

However, they also have lungs which help them to breathe on land.

2. Aerial animals have light bodies because of light bones and feathers, this shape of a body is such that it can easily cut through air.

3. Different ways by which animals protect themselves are:

1. Fishes, houseflies and frogs move fast enough to escape from their enemies.

2. Whales, elephants and hippos are too big to be eaten by other animals.

3. Zebras, tigers and leopards have strips or spots on their bodies which help them to merge or mix with their surroundings.

4. Fishes, elephants and leaf insects protect themselves as

- Fishes can move fast enough to escape from enemies.
- Elephants are too big to be eaten by other animals.
- Leaf insects look like the leaf and that keeps them safe from enemies.

