

Adaptations In Living Things

3



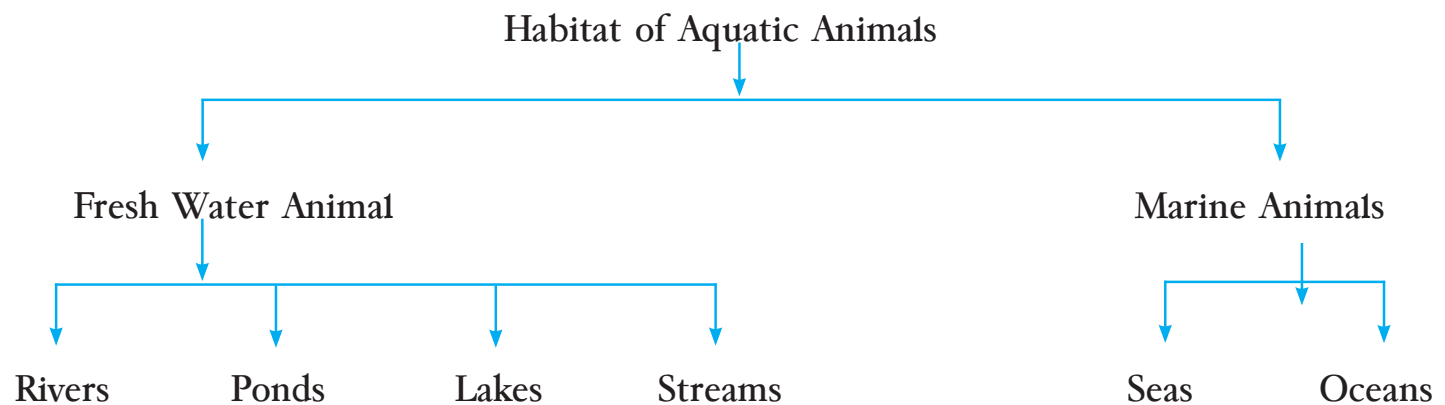
Like Plants, animals also adapt to their surroundings by adjusting their habits which is called adaptation. The living and dwelling place of an animals is known as habitat.

TYPE OF HABITAT

The following types of habitats are the most common in animals.

Aquatic life

Animals that live in water are known as aquatic animals and their habitat is known as aquatic habitat. They may live in fresh water or salt water. Salt water animals are known as marine water animals.



Starfish



Octopus

Seawater(mine) animals :

Sea fish, Sea snakes, Sharks, Whales, Starfish, Octopus, etc. are seawater animals.

Fresh water animals :

Fresh water fish, Frog, Snail, Crabs, Turtle, water birds, Ducks are fresh water animals.



Crab



Fish

Test your Self

1. Define terrestrial.
2. Name some habitat of animals.
3. Name some animals who protect by quick movement.

Terrestrial life

Animal that live on land are called terrestrial animals. Most of the terrestrial animals breathe through lungs. But insects breathe through spiracles and tracheal system, earthworm breathes through moist skin.

Some terrestrial animals live in very cold places and some at very hot places, like deserts yak, Arctic fox, polar bear, Musk deer. Mountain goats adapt themselves to live in snow cold region. They have thick hairy coat to keep them warm, the goat on the mountains have well developed hooves to climb steep mountains slopes.



Yak



Arctic fox



Polar bear



Mountain goat

Polar bear are found in snow covered areas. Their bodies are covered with thick white fur. They store fat under their skin to keep themselves warm.

Desert animals

The common animals seen in hot desert area are Mongoose, Snakes, Hares, Rats, Camels, Lizards etc. Camel is the most important animal which is the native of the desert. Its body is well adapted to live in desert regions because :

1. Camel can drink plenty of water in one gulp and store in its tissues. So it can live without water for several days.



Camel (ship of desert)

2. It also stores fat in its hump so that it can also stay without food for many days.
3. It has padded feet that help it to walk comfortably on the sand.
4. To minimise the wastage of water, camel loses very little water in its urine.

Some animals go in for long winter sleep to avoid cold weather. Frog, Snakes and certain Lizards burrow deep into the soil to find warmth and go to sleep for months together. This sleep is known as hibernation.

Aerial life

Birds are aerial animals and have adapted themselves to fly in the air, as they have

1. Streamlined bodies
2. Light and hollow bones
3. Air sacs attached to lungs
4. Forelimbs modified into wings
5. Bodies covered with feathers



Bird-Aerial animal

All the above features make the body of the bird suitable to fly.

Kiwi and Ostrich are birds but they can not fly, they are known as flightless birds.

Some birds like owls come out during the night in search of food. The animals which are active during nights are known as nocturnal animals. The animals which are active during daytime are known as diurnal animals.



Kiwi



Ostrich

Flightless birds

Arboreal Life

The animals which live on trees are called arboreal animals. Apart from birds, many insect, monkeys and squirrels are good examples of arboreal life. Monkeys make use of their tails and long arms to hang from one branch and then jump to another. Koala bear of Australia is an other example of arboreal animal.

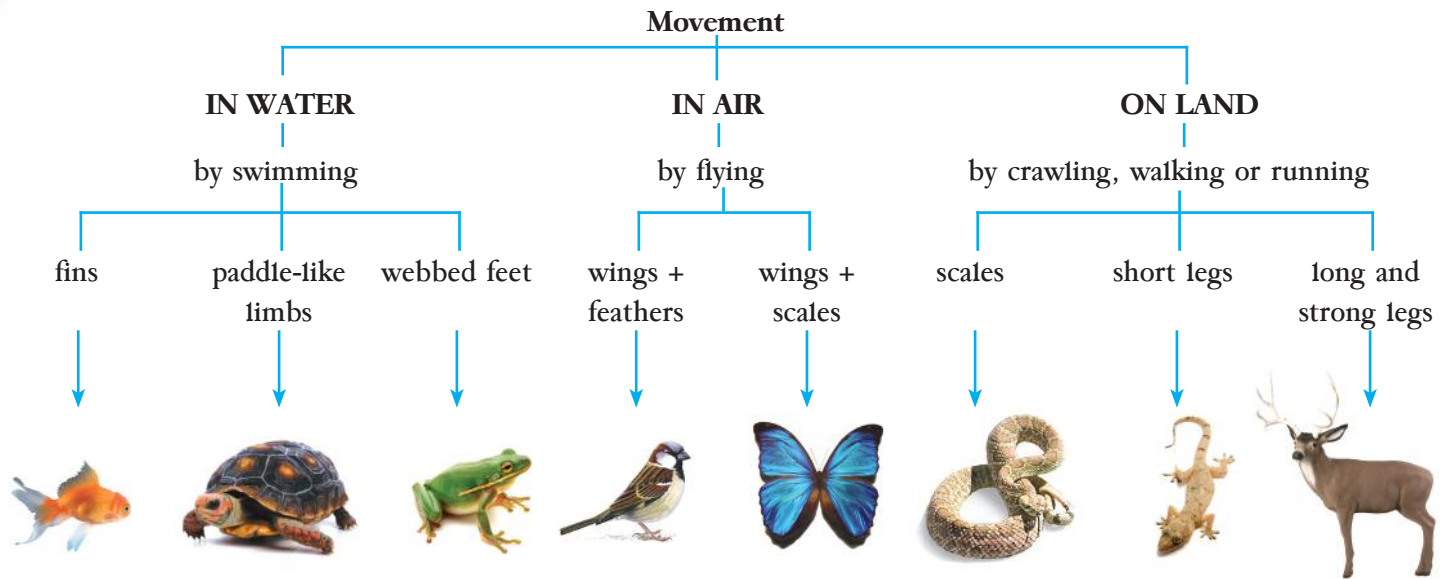


Monkey



Squirrel

The following chart shows how terrestrial, aquatic and air animals move and what different body parts help them in movement :



MIGRATION FOR ADAPTATION



Plants do not move. They have to adapt to the environment or they die. Animals migrate for adaptation. Migration is mass movement of animals from one place to another. Animals including human beings, migrate to escape harsh weather, to search for food and to reach their breeding grounds. Tortoise migrate to hundreds of kilometres to reach some coast to breed. Eels who live in fresh water travel to the sea to lay eggs.

Some monarch butterflies migrate from Canada to Mexico. Locusts are harmful migratory insects. They migrate to thousands of kilometres. The Arctic Tern travels a distance of about 1,70,000 km twice a year between the Arctic and the Antarctica. Mallard ducks, Hamingoes and Storks are migratory birds. The European stork travels from Europe to Africa every winter. When springs comes, it returns to Europe in the same nest. Cranes come to Indian sanctuaries from as far as Siberia. In February 1996, a family of three Siberian Cranes were seen in Keoladeo Ghana Sanctuary near Bharatpur in India.

Know the Keywords :

- Habitat : Natural home of an animal.
- Adapation : The Phenomenon of an animal of adjusting himself to the surrounding.
- Herbivores : Those animal who eats only plants.
- Carnivores : Those animals who eat only flesh of other animals.

Point to Remember

- Animals are found in different types of surroundings on land, in water and in the sky.
- Different animals have different limbs.
- The major habitats of animals are aquatic, terrestrial and aerial.
- Animals that live in water are called aquatic animals.
- The animals that live on land are called terrestrial animals.
- Terrestrial animals show wide range of adaptations.
- Insects, birds and bats have an aerial habitat.
- Migration of animals is a periodic movement of animals from one place to another place, and back to their original old places.

EXERCISE TIME

A. Multiple choice questions (MCQs).

Tick (✓) the correct option :

1. Snakes move with :

- a. Legs b. Limbs
c. Wriggling movements

2. Birds which swim in water have :

- a. Webbed feet b. Toes with claws c. Broad wings

3. Aquatic animals include :

- a. Lion b. Cow c. Fish

4. Desert plants include :

- a. Lotus b. Cactus c. Rose

B. Tick (✓) the correct and cross (X) the incorrect ones :

1. Different animals have different limbs.
2. Animals that live in water are called aquatic animals.
3. Insects, birds and bats have an aerial habitat.
4. Plants in water are called aquatic plants.

C. Fill in the blanks :

1. Dogs and elephants are _____ animals.
2. Fish are _____ animals.

3. Animals move long distance in _____.
4. All animals adapt to their _____.
5. Frogs are _____ animals.

D. Keeping in mind the eating habits of animals, choose the odd animal from the following :

1. Snake, lizard, frog, cow
2. Horse, cow, buffalo, vulture
3. Eagle, kite, vulture, squirrel
4. Lion tiger, cat, dog, pigeon
5. Crane, kingfisher, crocodile, butterfly

E. Answer the following questions :

1. Define desert animals.
2. What is habitat?
3. What is adaptation?
4. What are migratory birds?
5. Who are aquatic animals?



Creative Work

- Describe some Wildlife sanctuaries / National parks / Water-bird sanctuaries in India.

