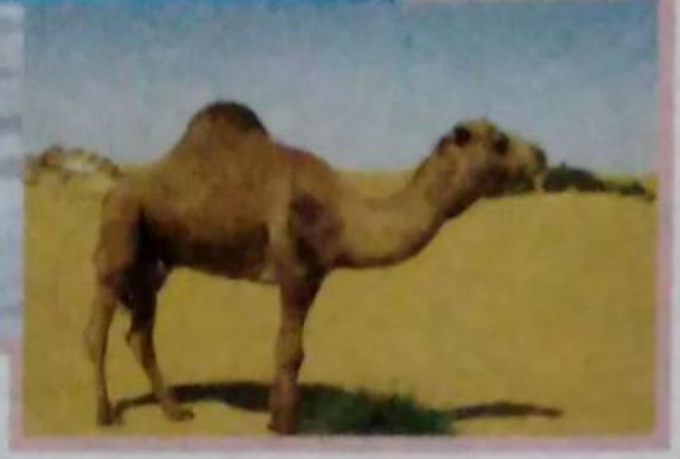
3 The Animal Body

Whale

Polar bear



Camel

The earth has a diverse climate. At places it is very cold and at other places it is very hot. It has extremely dry areas and very wet areas also. Animals have adapted themselves to these varied climatic conditions. Their eating habits, their body and skin, and their behaviour patterns are well adapted to their habitats.

Habitat – The place where an organism lives.

Food Habits of Animals

All organisms need food to live. Plants are the primary producers on the earth and the animals survive on plants or on smaller animals that feed on plants.

Herbivores

Animals that feed on grass, leaves or other parts of the plants are called as herbivores. The word herbivore is derived from two Latin words- 'herba' meaning plants and 'vorare' meaning eat. Different herbivores differ in their liking of the plant part that they feed on. The elephants like the sugarcane plant, pandas enjoy bamboo shoots etc.

The giraffe feeds on the twigs of trees, preferring leaves of the Mimosa. The giraffe defends itself against threats by kicking with great force. A single well-placed kick of an adult giraffe can shatter a lion's skull or break its spine. The giraffe has one of the shortest sleep requirements of any mammal, which is between 10 minutes and two hours in a 24-hour period. This has led to the myth that giraffes cannot lie down and that if they do so, they will die.

Carnivores

Animals feeding on the flesh of other animals are called as carnivores. The word 'carn' in Latin means flesh.

Many animals like the tiger, cheetah, jaguar, leopard, lion etc., are predators that hunt their prey.

- Predator – The animal that hunts a smaller animal for food.
- Prey – The animal that is killed for food by a bigger animal.

Carnivores

Scavengers

Animals like hyenas, foxes, vultures, raccoons etc., feed on the dead decaying animals left from the meal of the bigger carnivores. These are called scavengers as they work to clean up the dead remains.

Some animals feed on small insects or worms. The frog, lizard, woodpecker, hen, spider and the ant eater are examples of such animals and are called insectivores.

Insectivores

Omnivores

The word 'omni' means all or everything in Latin. Animals like crow, raccoon, fox, jackal, pig, rat etc., feed on plant parts as well as small animals. These are called as omnivores.

Omnivores

Parasites

The organisms that live on or inside the body of another organism are called parasites. Parasites do not kill the host organism but thrive on the living host, deriving nutrition from it. For example, louse survives by sucking the blood of the host organism, tapeworms and hookworms thrive in the intestine of human beings. The host organism in this case becomes weak and diseased.

- Host – The animal on which another organism depends for nutrition.

Quick Revision:

Tick the correct option in each:

1. Herbivore:
   - Raccoon ☐
   - Panda ☑
2. Carnivore
   - Fox ☐
   - Jaguar ☑
3. Scavengers
   - Vultures ☑
   - Tiger ☐
4. Omnivore
   - Cow ☑
   - Crow ☐
5. Parasite
   - Rat ☐
   - Louse ☑

Animal Habitats

Polar Regions

The polar region is characterized by very cold and long winters, and short and cold summers. The animals in the polar region have thick fur and an additional layer of fat under their skin. Most polar animals have a white coat that helps in camouflaging.

Arctic fox

Penguin

Polar animals

Polar bear

- Camouflage – The merging of an organism with its surroundings making it difficult to be noticed and killed.

Desert

Desert region is marked by hot and dry climate. The animals in such region maintain reserves of water and food inside their bodies. They have pale coloured skin that does not absorb too much heat. Their feet are padded so that they are able to walk on the hot sand without sinking. Some desert animals also keep themselves cool by burrowing during the day and coming out only at night.

Corals look like plants, and they don't move around like a lot of animals, but they are animals. What we see as branches actually are whole colonies of coral animals. Each animal, called a polyp, has a hard skeleton and a soft body. This is attached to rock, or to the skeletons of dead polyps. What we sometimes see as flowers actually are the tentacles with which they capture food from the water. One of the main differences between plants and animals is that plants make their own food, whereas animals must eat plants or other animals.

Camel

Fennec fox

Iguana

Desert animals

Fresh Water

The water in the rivers, lakes and ponds is called fresh water. The fish, shrimps and amphibians like frogs are examples of animals living in the fresh water bodies. The fish breathe through special organs

called the gills, while the amphibians like the frog can breathe with their lungs when on land and gills when in water.

Fish Frog Salamander

- Amphibians – Animals that can live both on land and in water.

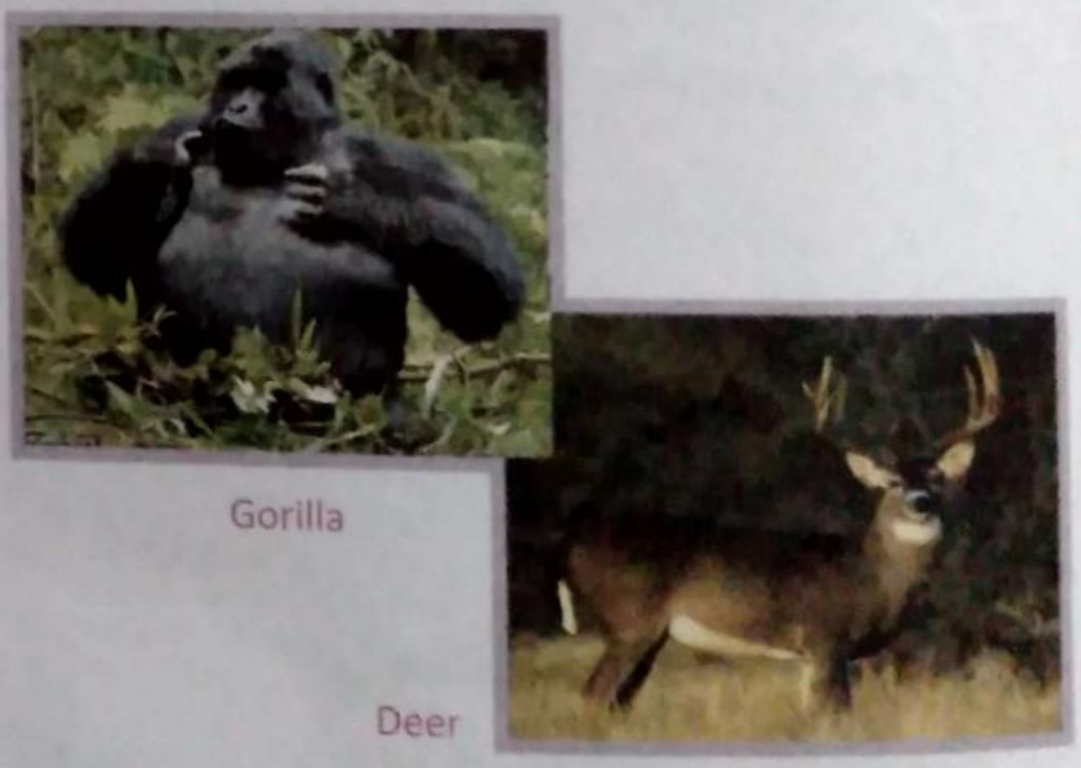
Whale Crab Octopus

Ocean

The oceans form the largest habitat of the earth and contain salty waters. They are a home to fish, sharks, whales, dolphins, clams, crabs, octopus, corals etc.

Forest

Forest are thick and dense areas with many trees and plants. They provide home to many four limbed animals, insects, birds etc. The warm and moist floor of the forest is a home for many fungi and decomposers like the earthworms.



Gorilla Deer

Quick Revision:

Fill in the blanks:

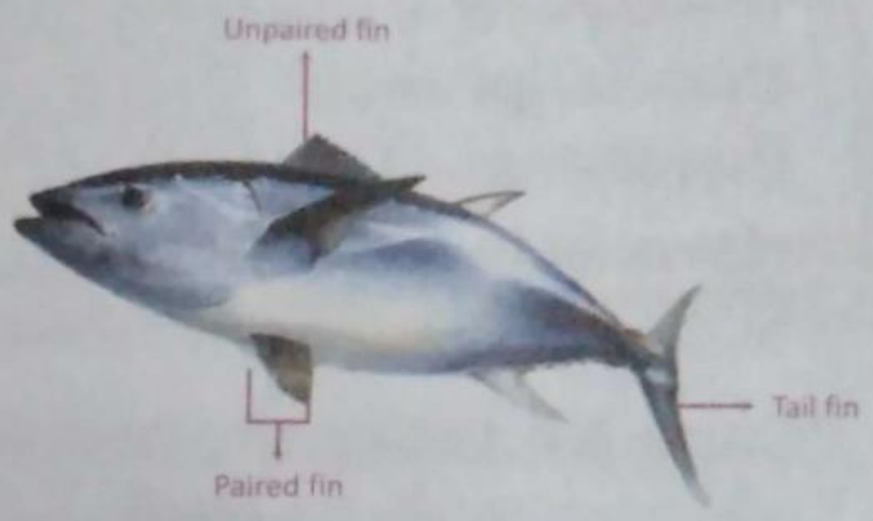
1. Animals in polar region have a layer of Fat under their skin.
2. Pale coloured skin does not absorb much heat.
3. Amphibians breathe through Gills and Lungs.
4. The floor of the forest is Warm and moist.

Movement in Animals

Animals move from one place to another in search of food and to protect themselves from predators. Different animals have different organs for movement.

Aquatic Animals

Animals living in water are known as aquatic animals. Fish move with the help of two paired fins and a tail fin that helps it to change its direction. An unpaired fin helps the fish to maintain its balance.




Penguin

Turtle

Octopus

Animals like turtles, octopus and penguins have paddle like limbs which they use to push back the water and swim. Frogs and ducks use their webbed feet to swim in water.


Ducks


Frogs


Fox

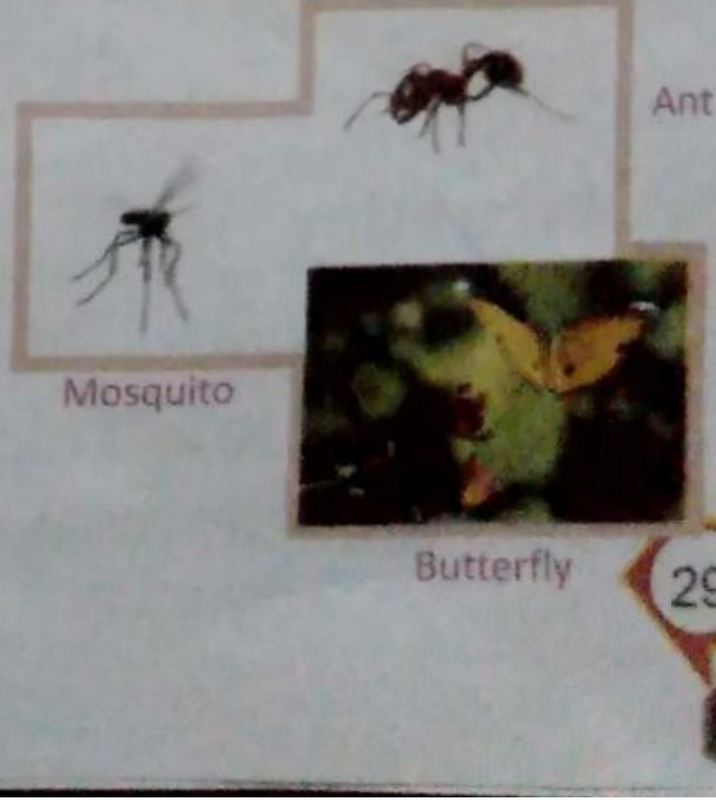

Deer

Land animals

Mammals living on land walk with the help of their limbs–the front two are called forelimbs and the two at the back are called hindlimbs.

Insects

Most insects are six legged creatures that crawl on their legs like the ants. Insects like housefly, butterfly and the mosquito fly with an added pair of wings while some types of cockroaches can both crawl and fly.



Birds

Birds have streamlined bodies and hollow bones that make them light weight. Their wings have light weight feathers and strong muscles that help them to fly long distances. Their feet and claws help them to perch and walk on the ground.

Eagle

Eagle claws

Some birds like the peacock and the hen can take very short flights whereas birds like the emu, ostrich and kiwi are flightless birds.

Hen

Peacock

Emu

Ostrich

Reptiles

Reptiles are cold blooded animals. Their body temperature changes according to the temperature outside. They have dry and scaly skin. Crocodiles and lizards have limbs that help them to move. Snakes crawl with the help of the scales.

Lizard

Snake

Migration

Some animals like birds and certain fish move to warmer places and waters in the cold winter months in search of food and suitable climate. This process is called migration.

The Arctic tern is known to cover the longest migratory distance from the south pole to the north, twice a year.

Arctic tern

Fact File

Jesus christ lizard

Jesus Christ lizard easily walks on water while holding even 15 times its body weight.

New Words

Scavengers – Animals feeding on dead decaying remains of animals.

Parasites – Animals surviving on the body of another living organism.

Migration – The process by which animals travel long distances in search of food and ideal climatic conditions.

Let's Revise

1. Herbivores are grass eating animals and carnivores are flesh eating animals.
2. Scavengers feed on dead decaying remains of animals.
3. Parasites thrive on the blood of the host organism.
4. Amphibians breathe through gills under water and through lungs on land.
5. Animals move from one place to another in search of food and for protection against predators.
6. Birds have a streamlined body, hollow bones, and light weight feathers that help them to fly.

Let's Answer

A. Give reasons for each:

1. Why do desert animals need reserves of food and water? because (27) (A1)
2. Why do Birds undertake migration? because 30 A_2
3. Why is host-parasite relation is dangerous for the host? because 26 A_3

B. Fill in the blanks:

1. Ocean is the earth's largest habitat.
2. The body of polar animals is covered with thick fur
3. Camouflage is merging of an organism with its surroundings.
4. Desert animals burrowing during the day and come out at night.
5. Ocean waters are Salty .

C. Give two examples of each:

1. Animals living in fresh water bodies — Frog, Fish
2. Desert animals — Camel, Iguana
3. Polar animals — Penguin, Polar Bear
4. Flightless birds — Ostrich, Emu
5. Cold blooded animals — Snake, Lizard

D. Answer these:

1. Enlist with examples the type of animals on the basis of their diet (4) Point 24, 25, 2
2. Write three adaptations in animals thriving in the desert region. 27 (3) Poi
3. What are scavengers? Explain with examples. 25 (D3)
4. Explain the organs for movement in aquatic animals. 29 (3) Point (D4)

Art Fun Draw and colour two animals that lay eggs and two animals t give birth to their young ones.