

4 Birds

BEFORE WE START, LET'S CHECK

What you already know

Name the birds in the pictures.



S R W



P R T



P C K



P G N

What you will know

Why and how does a bird fly?



Why are beaks and claws of birds different?



How do birds make nests?



How do birds take care of their young ones?



You must have seen beautiful birds flying in the sky.

Sometimes, we also want to fly like birds but we cannot. Let's see what helps a bird to fly in the air.

HOW BIRDS ARE ABLE TO FLY?

1. The body of a bird consists of a head, a trunk, a tail and two legs. All of these are very light.
2. The bones of a bird are hollow. Birds do not have teeth. So their body is very light.
3. A bird has a boat-shaped body. It cuts through the air easily.
4. A bird's body is covered with small fluffy feathers. They are called **down feathers**.
5. Two wings are attached to a bird's trunk. Long, flat feathers are attached to them. Birds use these wings to fly. The feathers on the wings are called **flight feathers**.



down feather



wing



flight feather

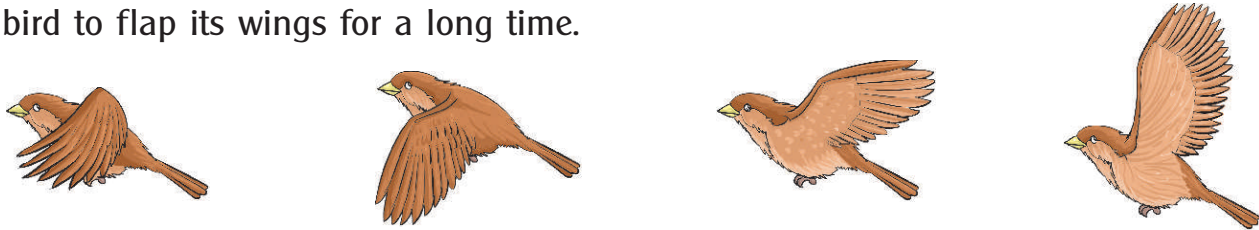
HOW DOES A BIRD FLY?

Look at a bird's wings. Its wings are broad and round in the front, and narrow and pointed at the back.

First, a bird contracts its wings and throws them upwards and backwards. It is called an **upstroke**.

Then, the bird expands its wings and throws them downwards and forwards. It is called a **downstroke**.

This way, the bird flaps its wings repeatedly and quickly. These strokes lift the bird into the air and the bird flies. The muscles attached to the wings are very strong. They help the bird to flap its wings for a long time.



Birds use their tails to change the direction during flight.

The wings of some birds like kites and eagles are very large in proportion to their body. So, when such birds reach a certain height, they simply spread their wings and float around.

KNOW A FACT



The wandering albatross has the largest wingspan—from 8 feet to 11 feet.

Different kinds of fliers



eagle

kite

Some birds can fly very high up in the sky.



sparrow



bulbul

Some birds can fly at a smaller height.



flamingo



pigeon

Some birds can fly very long distances.



peacock



hen

Some birds can fly only short distances.



ostrich



kiwi



penguin

Some birds cannot fly at all. They are called flightless birds.

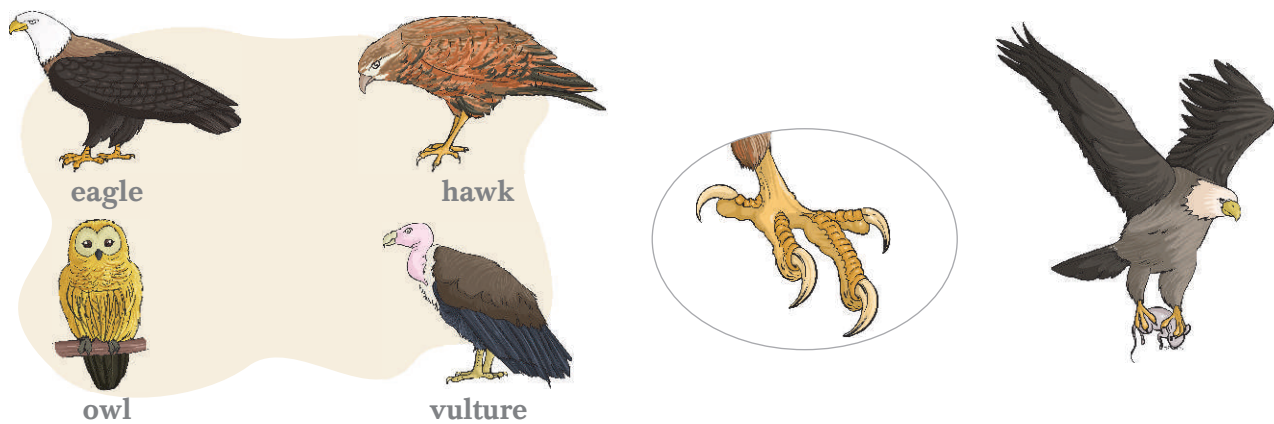
BEAKS AND CLAWS

Birds use their beaks and claws to catch, hold and eat their food. All birds do not eat the same kind of food. The shape of a bird's beak and claws is suited to the type of food it eats.

Flesh-eating birds

Eagles, hawks, owls and vultures are birds of prey. They eat small animals like rats, snakes and frogs.

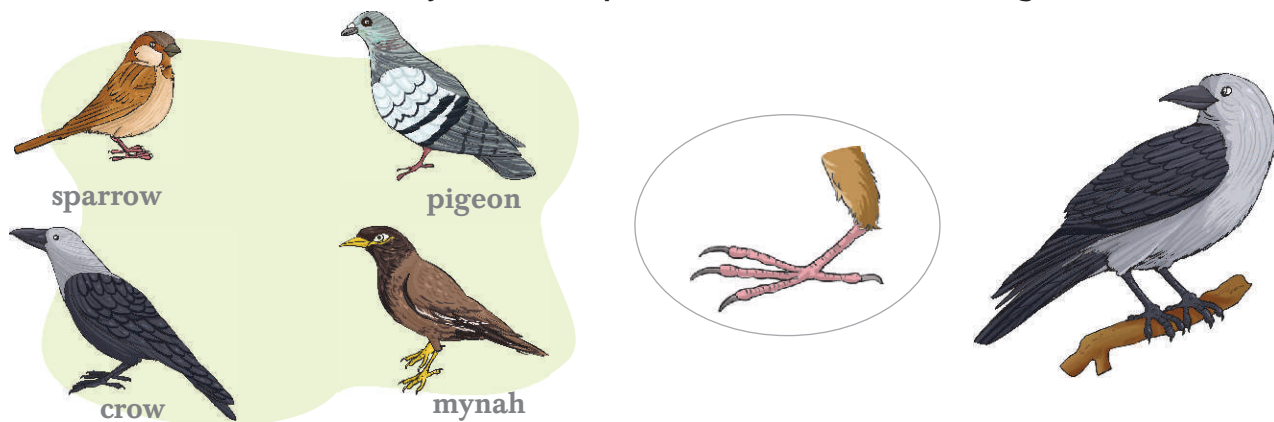
The beaks of these birds are strong and sharp. The upper portion is hook-shaped. It helps them to tear the body of their prey into small pieces.



Birds of prey have strong and sharp claws called **talons**. They help them to catch and hold live prey.

Perching birds

Sparrows, pigeons, crows and mynahs eat very tiny seeds, grains, insects and worms. They have short, hard and horny beaks to pick and crush seeds and grains.



These birds have three toes in the front and one at the back. Such toes help the birds to hold on to a branch. This is called **perching**. These birds can even sleep while they perch.

Climbing birds

A woodpecker has a strong chisel-shaped beak. It uses its beak to make holes into hard tree trunks and pull out insects from the holes. A parrot has a curved beak, which helps it to crack nuts and hard fruits.



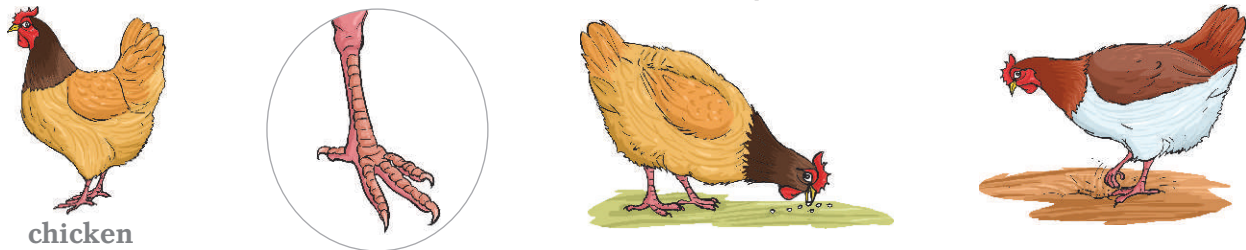
woodpecker

parrot

Woodpeckers and parrots have two toes in the front and two at the back. These toes help them to climb trees and hold on to them. A parrot also uses its beak to climb a tree.

Scratching birds

Chickens scratch and dig the ground with their beaks and claws. They do it to search buried seeds and insects. Their beaks are small and pointed.

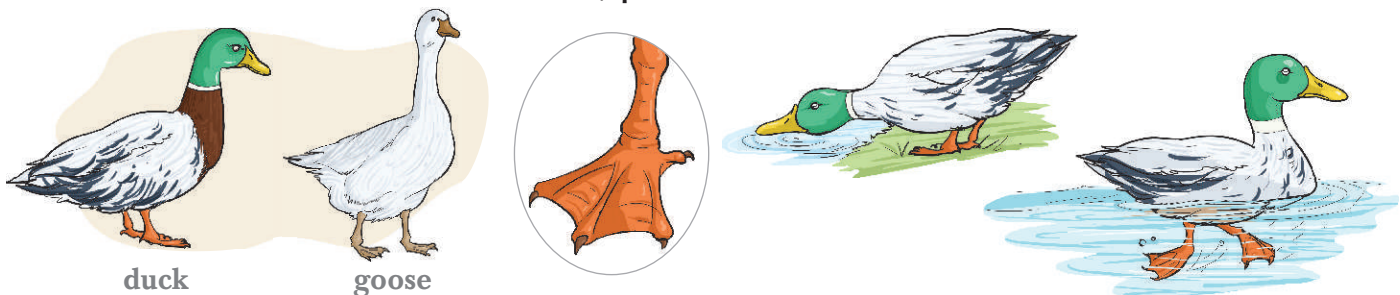


chicken

Their legs are strong with three toes in the front and one toe at the back. These toes have sharp and hard claws for scratching.

Swimming birds

Waterbirds like ducks and geese have broad and flat beaks. Their beaks have tiny holes in the sides. These birds take in muddy water with insects, worms and small plants. The water flows out of these holes. Insects, plants and worms are left behind for them to eat.



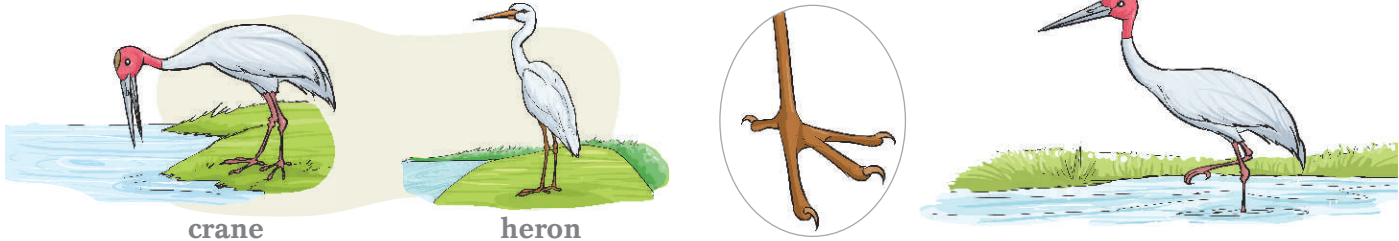
duck

goose

These birds have three toes in the front and one toe at the back. The front toes are joined together by skin forming a web. The birds use their webbed feet as paddles. They push water back with their feet and swim forwards.

Wading birds

Cranes and herons can walk through water, which is called **wading**. These birds eat fish, frogs and insects from the water. They have long, sharp and pointed beaks. Their beaks help them to catch their prey easily while standing in the water.



These birds have long, slender legs. They help them to walk in shallow water without getting wet. Their spread-out toes enable them to stand on the soft mud without sinking.

BIRDS' NESTING HABITS

Birds build nests to lay their eggs in. They choose such places for their nests, which are safe in bad weather and hidden from their enemies. Birds make nests in trees, on rooftops, in the holes in walls, in the cracks in rocks, in the hollows of trees, etc. They use twigs, grasses, threads, bits of paper, rags, feathers and even mud to build their nests.

All nests are quite warm and comfortable inside.

Types of nests



A **weaver bird** uses its beak to weave pieces of leaves, grasses, etc. together to build a nest. The nest hangs from a tree. It has an opening at the bottom as entrance.



A **tailorbird** uses its beak like a needle and stitches leaves together to build a nest. It uses threads, plant fibres, wool, etc. for stitching. It then keeps hair, grass, cotton, feathers, etc. in the nest.



Vultures and **eagles** build their nests on treetops or on high rocks. They gather a few sticks and put them together to make an untidy nest.



A **woodpecker** pecks a tree trunk with its beak to make a hole for a nest. Fine chips of wood are used to line the nest.

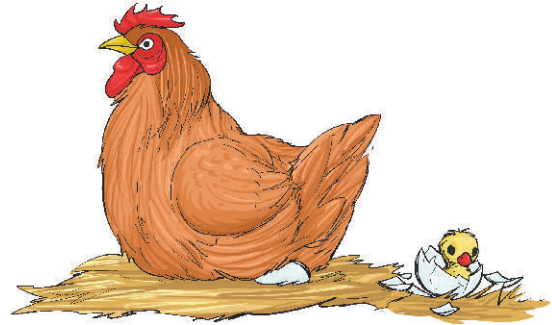


Penguins live in very cold places. Grasses, twigs or straw are not available there. So penguins collect some pebbles and make their nests on the ground.

CARE FOR THE YOUNG

The mother bird lays eggs in its nest. Baby birds are inside the eggs. But they need warmth to develop fully. The mother bird sits on the eggs to give them warmth. The father bird protects them from enemies.

After a few days, the babies grow, break the shells and come out. This is called **hatching**.



Baby birds are very weak and without feathers. Their parents feed them and look after them. Soon, they grow. Their parents teach them to fly and find food for themselves.

Words to Remember

down feathers	– small feathers covering a bird's body
flight feathers	– long and flat feathers attached to a bird's wings
talons	– strong and sharp claws of birds of prey
perching	– the resting of a bird on a tree or rod
wading	– walking through water
hatching	– the breaking of an egg and coming out of a baby bird from it

Points to Recall

- * A bird can fly because of its light weight, boat-shaped body and strong wings.
- * A bird makes upstrokes and downstrokes with its wings to fly.
- * Some birds can fly high in the sky while some can fly at a smaller height
- * Some birds can fly very long distances while some can fly only short distances.
- * Some birds are flightless, that is, they cannot fly.
- * Different birds have different kinds of beaks and claws.
- * The shape of a bird's beak and claws is suited to the type of food it eats.
- * Birds make nests to lay eggs and care for their babies.

Exercises

A. Tick (✓) the correct option.

1. The feathers which help a bird to fly are _____ feathers.

(a) down

☐

(b) up

☐

(c) flight

☐

(d) body

☐

2. Which of these birds can fly very high in the sky?

(a) hen

☐

(b) eagle

☐

(c) kiwi

☐

(d) peacock

☐

3. Which of these is a flightless bird?

(a) flamingo

☐

(b) kite

☐

(c) heron

☐

(d) penguin

☐

4. _____ birds have hook-shaped beaks.

(a) Scratching

☐

(b) Swimming

☐

(c) Flesh-eating

☐

(d) Wading

☐

5. Which of these birds uses its beak to climb a tree?

(a) crow

(b) parrot

(c) sparrow

(d) vulture

B. Write 'T' for true statements and 'F' for false ones.

1. A bird uses its tail to get lifted into the air.
2. Perching birds can even sleep while they perch.
3. Scratching birds have webbed feet.
4. Birds build nests to live in them.
5. Penguins live in very cold places.

C. Match the following. One has been done for you.

- | | | |
|------------|---------------------|------------------------------|
| 1. hawk | (a) perching bird | (i) holes in the beak |
| 2. sparrow | (b) bird of prey | (ii) curved beak |
| 3. parrot | (c) swimming bird | (iii) long, slender legs |
| 4. duck | (d) wading bird | (iv) short, hard, horny beak |
| 5. hen | (e) climbing bird | (v) hook-shaped beak |
| 6. crane | (f) scratching bird | (vi) small, pointed beak |

1.	(b)	(v)
2.		
3.		
4.		
5.		
6.		

D. Answer in one or two words.

1. What part of a bird's body is hollow?
2. Name the bird with the largest wingspan.
3. What do we call the birds that cannot fly?
4. What are the sharp claws of flesh-eating birds called?
5. What bird makes holes in trees with its strong beak?

E. Answer in one sentence only.

1. How many teeth does a bird have?
2. How does its hook-shaped beak help a bird of prey?
3. How does a tailorbird make its nest?
4. Why does a penguin make its nest using pebbles?
5. What is hatching?

F. Answer in two or three sentences.

1. How does a bird fly?
2. How do ducks eat?
3. How do a crane's legs help it?
4. Where do birds make nests?
5. Why does a mother bird sit on her eggs?



BRAINSTORM

1. An ostrich is a bird with wings but it cannot fly. Can you tell why?
2. Why does an eagle make its nest on a treetop or a high rock?



TELL YOUR TEACHER

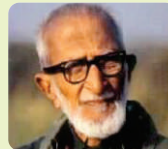
Look at the pictures. Tell your teacher what right or wrong thing the child in each picture is doing.



FIND OUT



Look at this picture of an animal. It is a flying animal but it is not a bird. Find its name.



This great Indian loved watching birds. He has written many books on birds. Find his name.

Project

Go to a garden and collect some colourful feathers. Now take a sheet of chart paper. Cut it in the shape of a greeting card. Draw a picture of a bird on the cover of the card. Paste the feathers on this picture. Write a message on the inner side. Present the card to your teacher.

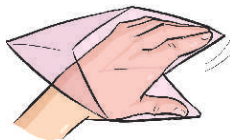


Activity Time

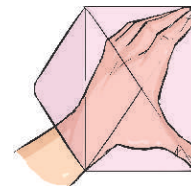
Make a hand bird puppet



1. Take an empty envelope, some crayons and feathers.



3. With your other hand, press in the front edge of the envelope. Now, by opening and closing the hand, you make a bird's beak open and shut.



2. Put your hand inside the envelope, stretching your fingers into the upper corner and your thumb into the lower.



4. Now, draw eyes and the beak and colour them with crayons. Stick a feather as shown.

Virtual Tour

For more information visit:

- <http://www.factmonster.com/dk/encyclopedia/birds.html>
- http://www.biologyjunction.com/bird_adaptations.htm