



Birds

- Know how a bird flies
- Learn about feathers, beaks, feet and claws of birds
- Study where birds live



WARM-UP

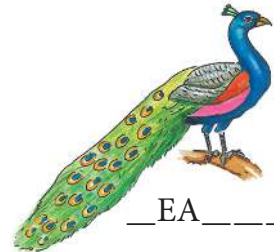
1. Name the birds shown here by filling in the missing letters.



H _ _ _



_ A _ _ O _



_ E A _ _ _ _



_ _ _ G _ _ N



_ W _



P _ G _ _ N

Birds are beautiful feathered living things.

Birds fly with the help of their **wings**. They have strong muscles to move the wings. These are called **flight muscles**.

The body of a bird is designed to help it fly. It is shaped like a boat. This is called a **streamlined body**, which makes it easy for a bird to fly.

Name another animal that has a streamlined body. ►



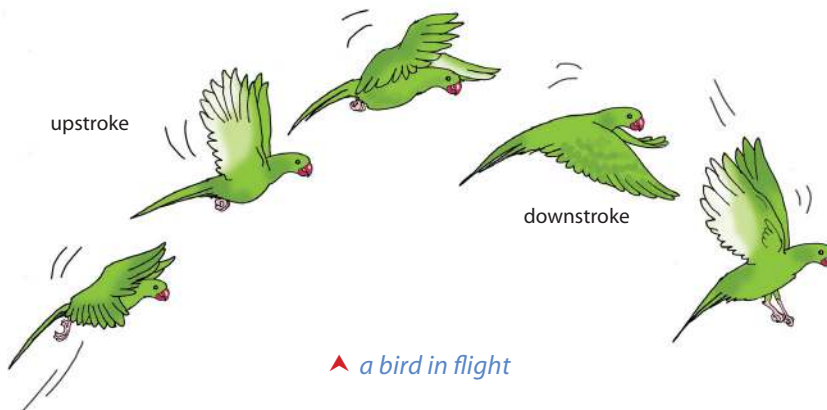
The body of a bird is light because it is made of **hollow bones**. This helps it to fly easily and for a long time.

The tail of a bird helps it to change directions while flying.

HOW DOES A BIRD FLY

When a bird has to fly, it lifts itself up in the air by flapping its wings. This helps it move upward and forward. This movement is called the **upstroke**.

When the bird has to land, it spreads out its wings and it glides down smoothly without much flapping. The downward flapping of wings is called the **downstroke**.



Flightless Birds

There are over 9000 different kinds of birds in the world. Most of them can fly. But there are some birds that cannot fly. The ostrich is a flightless bird.

Name two more birds that cannot fly.

FEATHERS

Feathers are an important part of the bird's body. They help the bird to fly, keep the body warm and give it shape.



▲ ostrich

Birds have three types of feathers, which are described here.

Flight feathers are large in size. These feathers are found in the tail and wings. They help birds to lift themselves and balance for flight.

Down feathers grow close to the skin and keep the bird warm. These are short and soft feathers. A newborn bird has a lot of down feathers.

Body feathers round out the streamlined body of the bird. They give shape to the bird's body.

Different birds have feathers of different colours.



▲ *flight feather*



▲ *down feather*



▲ *body feather*

BEAKS

Birds do not have teeth. They eat with their beaks. Different birds have different kinds of beaks. The shape of the beak depends on the kind of food a bird eats.



▲ *A parrot has a **short curved beak** to crack nuts and seeds.*



▲ *A hummingbird has a **long curved beak** which dips into flowers to suck nectar.*



▲ *A duck has a **broad flat beak** with holes at the side for the water to flow out.*



▲ *An eagle has a **sharp hooked beak** to tear flesh.*



▲ *A crane has a **long pointed beak** which is used to catch fish in water.*



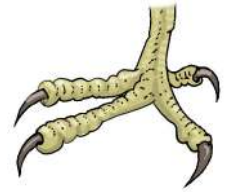
▲ *A woodpecker's beak is **sharp and pointed** to help it pull out insects by making holes in a tree trunk.*

FEET AND CLAWS

Birds use their feet and claws to catch food, to protect themselves and to sit on tree branches. Different birds have different types of feet.

Flesh-eating birds

Flesh-eating birds, like eagles, have sharp and curved claws called **talons** to catch their prey.



▲ *claws of an eagle*



▲ *toe of a sparrow*

Perching Birds

Crows and sparrows sit on trees and wires by gripping the branch or wire. This is called **perching**. They use the front toes like we use our fingers. The back toe is used like our thumb.

Scratching Birds

Hens and roosters dig out insects and worms from the ground. They have strong legs with sharp and hard claws for **scratching** the ground.



▲ *toe of a hen*



▲ *toe of a duck*

Swimming Birds

Water birds like ducks and geese have **webbed** feet. Between each toe is a skin web. These help the birds while **swimming**.

Wading Birds

Water birds like cranes and herons have long and thin legs. The spread-out toes prevent the birds from sinking into the mud in a pond. These help them to walk through water in search of food. This movement is called **wading**.



▲ *toe of a crane*



▲ *toe of a woodpecker*

Climbing Birds

Some birds, like the woodpecker, use their toes to climb trees. Their feet have two toes that point upwards and two toes that point downwards. This helps them to hold on to the tree while **climbing**.



1. Name a bird that

- a. has a sharp and pointed beak.
- b. has webbed feet.
- c. uses its beak to tear flesh.
- d. has sharp and curved claws.

WHERE DO BIRDS LIVE

Birds build nests. Birds use twigs, grass, feathers, cotton, wool, leaves and sometimes even mud to build their nests.

Different birds make different kinds of nests.

A woodpecker makes a hole in a tree with its beak. The hole is used as a **nest**.



▲ woodpecker's nest

Eagles make their nests on rocks.



▲ eagle's nest

A weaverbird uses grass, twigs and leaves to weave a nest with its beak. There is an opening at the bottom of the nest for the bird to enter.

A tailor bird makes its nest out of large-sized leaves. It uses its beak like a needle to stitch the leaves together using cotton threads or threads from a spider's web.



▲ weaverbird's nest



▲ tailor bird's nest



Info Bits

The cuckoo lays its eggs in the nests of other birds like crows.

Penguins make their nests on the ground with a few stones or pebbles.



▲ penguin's nest

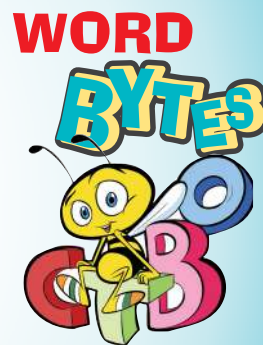
streamlined: broad in the middle and narrow at the two ends

talons: sharp and curved claws in flesh-eating birds

perching: sitting of birds on trees and wires by gripping with their feet

scratching: rub nails over something

webbed: feet of some animals having the digits or toes connected by thin folds of skin



- Birds have wings, a streamlined body, hollow bones, and strong muscles.
- The body of a bird is covered with different kinds of feathers. They are—flight feathers, down feathers and body feathers.
- Beaks of birds are suited to their eating habits.
- Different birds have different types of feet and claws.



REVIEW ZONE

A Tick (✓) the correct answer.

1. Which of the following helps the bird to change directions while flying?
a. bones b. tail c. beak d. eyes
2. Which of following is an example of a flightless bird?
a. hen b. sparrow c. crow d. ostrich
3. Which one of following birds makes its nest with stones or pebbles?
a. weaverbird b. woodpecker c. penguin d. cuckoo

B Choose the most suitable word from the following to fill in the blanks.

hollow bones talons beaks body down flight

1. Birds eat with their

2. feathers give shape to the bird's body.
3. The claws of an eagle are called
4. A newborn bird has a lot of feathers
5. The body of a bird is light because it is made of



C State whether the following statements are TRUE or FALSE.

1. Birds have a streamlined body.
2. Birds do not have hollow bones.
3. The tail of a bird acts like a brake.
4. Claws do not help birds to catch food.
5. Birds build nests for laying eggs.

D The baby owls were feeling hungry. So the mother owl went to look for food. On her way back, the mother owl lost her way. Help the mother owl reach the baby owls.



E Match the birds with the food that they eat.

(Clue: Look at the beaks carefully.)

1.		2.		3.	
a		b		c	

F Answer the following questions.

1. What are flight muscles?
2. Why do birds have hollow bones?
3. What does downstroke mean?
4. Name some materials that birds use to make nests.
5. What kind of feet do ducks have? Why?



HOTS CORNER

1. What would happen if eagles did not have curved claws?
2. What would happen if all the toes of a woodpecker pointed in one direction?
3. Name a non-living thing that has a streamlined body. Why does it have this shape?



ENHANCE YOUR LIFE SKILLS

1. Which is the bird that can mimic our speech?
.....
2. Do you think it is a good idea to keep birds at home in cages? Discuss. How do you think the birds feel?





ONLY A CLICK AWAY

1. Water birds move in different ways while trying to catch their prey. They swim, dip in water, skim the water, probe mud and dive. Take help from your elders and write about them in your science notebook. You can use the following link to print water birds' colouring pages and have fun with crayons.

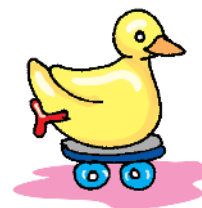
<http://www.fun-with-pictures.com/waterbirds-coloring-page.html#axzz1KoX58pxF>



ACTIVITY BAG

1. Look at the toy bird, the toy aeroplane and the toy boat. Observe all the three carefully. Do they have a similar basic shape? Why?

Activity
1



2. Finding a feather is a wonderful treat. So why not try to look for birds' feathers? Go to the nearby park. Collect and paste feathers of different birds in a scrap book. You can take help from your teachers or elders to help you identify what bird lost each feather. You can also use these feathers to make beautiful greeting cards.
3. Most states in India have a state bird. Find out the name of your state bird. What are its habits? Where does it nest? Collect pictures of birds and paste them on a drawing sheet. For example, the state bird of Orissa is peacock.



Teacher's Notes

- Teacher can tell the students to mimic the wing movements made by a bird during flight.
- Teacher can tell the students that birds build nests for their eggs and discuss how they take care of their young.
- Answers to Question Drill: 1. a. woodpecker; b. duck; c. eagle; d. eagle.