

Class – 3

Subject - Science

Chapter-2 Birds – A flying wonder

CHAPTER EXPLANATION IN BREIF

Birds are beautiful animals that can fly. Their body is divided into three parts – head, trunk and a tail. They have two pairs of limbs – the legs and the wings. Birds have legs, but no hands. Their wings are covered with feathers. Many birds can fly with the help of their wings. The mouth of bird is called a beak. But they don't have teeth. But birds itself distinguish or different with each other. Following are the features that distinguish birds from other animals and themselves too.

Features, Beak, Feet and claws

- ❖ Structure of a Bird – The body if a bird consists of head, wings, features, legs & feet.
 - ❖ Beak – Birds use their beaks to catch and eat food. Different birds have beaks with different shapes which helps them eat different kinds of food.
 - ❖ Feathers – All birds have bodies covered with feathers. Each bird has different kinds of feathers.
 - Body Feathers – They are coloured fathers, which cover the body of the bird.
 - Down Feathers – Down feathers are soft and fluffy feathers found close to the body of a bird. They help birds to keep their bodies warm.
 - Flight Feathers – Flight feathers help birds to fly. They are found on the wings and the tail.
 - ❖ Feet and claws - All birds have two feet and four toes. The feet and claws help the bird walk, wade through water and catch food. Different birds have different kinds of feet to help them live in their surroundings or gather food.
1. Short and hard beaks – This beak helps it to crack open nuts or seeds and scoop out the pulp of fruits with the help of it. Short, hard, pointed beak. This helps it to pick up seeds and worms easily and crushes with its beak to eat.

2. Strong, sharp and Hooked Beak – Birds of prey which catch and kill live prey have sharp, “hooked” shape beaks. These are used to bite the skull or neck and also to tear the body into pieces small enough to swallow.
3. Chisel shaped beak – Chisel shaped beaks help the birds to tap the bark of a tree and to make holes in tree trunks in search of insects. For example – woodpecker.
4. Long and Pointed beak – Some birds have a long and slender beak which helps them to suck nectar from flowers. For example – Humming bird.
5. Curved beak – Birds having curved beak used for cracking nuts and fruits and also helps them to climb up. For example- parrot.
6. Broad and flat beak – Birds having this kind of beaks resembles a spoon. Beaks have hole on the sides with which catch insets and worms in muddy water. For example- duck, swan and spoonbill.

Feet’s and claws of birds

- ❖ Wading Birds – Birds having long and thin legs with spread toes them to walk under water and catch their pray, for example – crane and heron.
- ❖ Preaching Birds – Birds of these kinds have three long toes in front and one at the back. It helps them to hold the tree branches firmly. For example – sparrow and crow.
- ❖ Scratching birds – These kinds of birds have sharp, hard claws. Such toes help them to scratch the ground to find seeds and insects.

There are some birds who are basically known as flesh eating birds. They have sharp curved claws called talons. It helps them to catch and hold their prey. For example- parrot and woodpecker.

Swimming birds have webbed feet in which they skin between the three front toes which helps them to pushy back water while swimming. For example- duck and swan.

How do birds fly?

Birds wings have feathers and strong muscles attached to them. With the help of their strong arm and fly. This is because the bones of birds are thin, light and hollow. This shape of a bird’s body is like an aeroplane.

- ❖ Movement of wings – Birds wings flap with an up and down motion. The bird reduces its angle of attack and partially folds its wings on the upward stroke so that it passes through the air with the least possible

resistance. The inner part of the wing has very little movement and can provide lift in a similar way to gliding.

- ◆ Up stroke: wings move upward and backward.
- ◆ Downstroke: wings move downward and forward.
- ❖ Some birds are known as flightless birds because of their heavy bodies. They can just walk around but can't fly. For example: kiwi, penguin and ostrich.
- ❖ Homes of Birds: As you all know the home of birds is known as nest which helps them to lay eggs and to protect them from enemies and also where they can take care of their young ones.

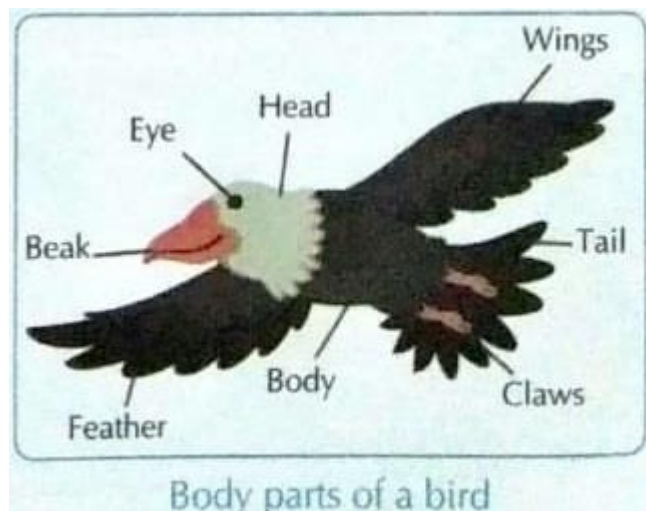
There are different kind of nests made by different type of birds.

1. Cup-shaped nests – Materials used to make such kind of nest is grass, soft cotton, twigs, cloth and feathers. It is mostly built on high places on branches of trees and open ceiling of houses. The shape of nest seems like a cup which keeps their egg and chicks safe inside.
2. Stitched Nests: This kind of nests is weaved by tailor bird with its sharp needle like beak.
3. Woven Nests: This kind of nest is mainly found on tree branches. To make this nest birds use fine strips of palm leaves, banana leaves, grass etc. It's a kind of very creative and attractive tunnel shaped nest with an opening at the bottom for entry.
4. Hollow nests :- This kind of nests are made by woodpecker by making a hole in the trunk of a tree with the help of their sharp and strong beak.
5. Platform nests :- Birds like vulture makes this kind of nest on the top part of the branch of a tree or on rocks. Their nest is also called as eyrie.
6. Ground nests :- As we all know or must have seen that penguins live in bulk crowd known as big colonies. They make their nest with stones, pebbles and bones on the ground.

PARENTAL CARE OF YOUNG BIRDS.

Parental care refers to the level of investment provided by the mother and the father to ensure development and survival of their offspring. In birds when the nest is ready the mother bird lays the egg in it. Then both the parent birds take care of that eggs in warming turn by turn. In this process one bird sits on the egg to keep it warm and the other protects the nest from enemies. Then after when the eggs are well developed and the shells break and chicks comes out. This is called hatching. When the chicks are small, they are very weak and do not have feather. Hence the parent birds take care of them by feeding and protecting them from enemies. Then after when these chicks grow up. The parent bird teaches them to fly and gather food of their own.

- Draw, label and colour this diagram of body parts of a bird in your note book.



THANK YOU....

STAY HOME

STAY SAFE.....