

Science

Birds : Feathers and Flights



By :-

Ms Jyotika Guleria

Birds

- ❖ Birds are the animals with their bodies covered with feathers.
- ❖ They have a pair of wings and a pair of legs and feet.
- ❖ They do not have lips and teeth but a hard beak instead.



Birds

Flight

- ❖ Birds fly with the help of their wings.
- ❖ Strong muscles attach the wings to their body which are called as **flight muscles**.
- ❖ These muscles allow the birds to move their wings up and down or forward and backward.
- ❖ Birds have **hollow bones** which reduces their weight.
- ❖ **Tail** of the birds is used to change direction and to reduce speed.
- ❖ Their **boat shaped body** helps to cut through the air easily.



Flight Muscles



Hollow Bone



Boat like body

Birds

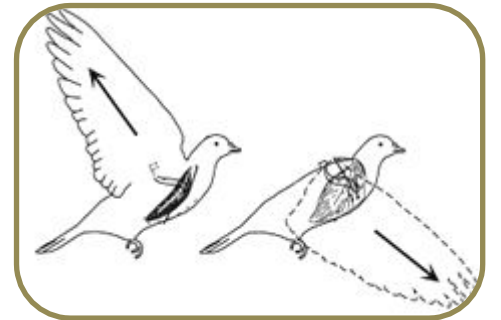
Flight

Flight :-

- ❖ Birds flap their wings to fly.
- ❖ It has two types of movement:-
 - ❖ Up-stroke :- The wings move up and backward.
 - ❖ Down-stroke :- The wings move down and forward.



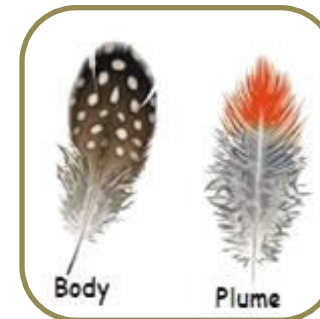
Up and Down strokes



Birds

Feathers

- ❖ Feathers cover the body and wings of the birds.
- ❖ They are of three types:-
 - ❖ Body Feather :- These cover the body of the birds.
 - ❖ Down Feather :- These are short and fluffy feathers that keep the body of the birds warm.
 - ❖ Flight Feathers :- These are large feathers that are mostly found on the wings and tail of the bird which they use to fly.



Body Feathers



Down Feather



Flight Feathers

Birds

Birds that cannot fly

- ❖ Example :- Ostrich, Emu, Penguin etc.
- ❖ These are large sized birds that cannot fly.
- ❖ They don't have hollow bones.



Ostrich



Emu

Animals and their young ones

Keywords

Flight muscles

Muscles that attach the wings to the bird's body and help in flying.

Down Feather

short and fluffy feathers that keep the body of the birds warm

Adaptations in animals

Revise and Recall

State whether the following statements are True or False:-

1. Tail is used by the birds to reduce speed.

True

2. Ostrich doesn't have feathers.

False

3. In upstroke, wings move forward.

False

4. Flight muscles are strong muscles.

True

5. Birds have hollow bones.

True

6. Birds have boat like body.

True

Think and Answer

Q: Discuss types of feathers in birds?

Q: Discuss up-stroke and down-stroke in bird flight?

