

Science

Adaptations in Animals

By :-

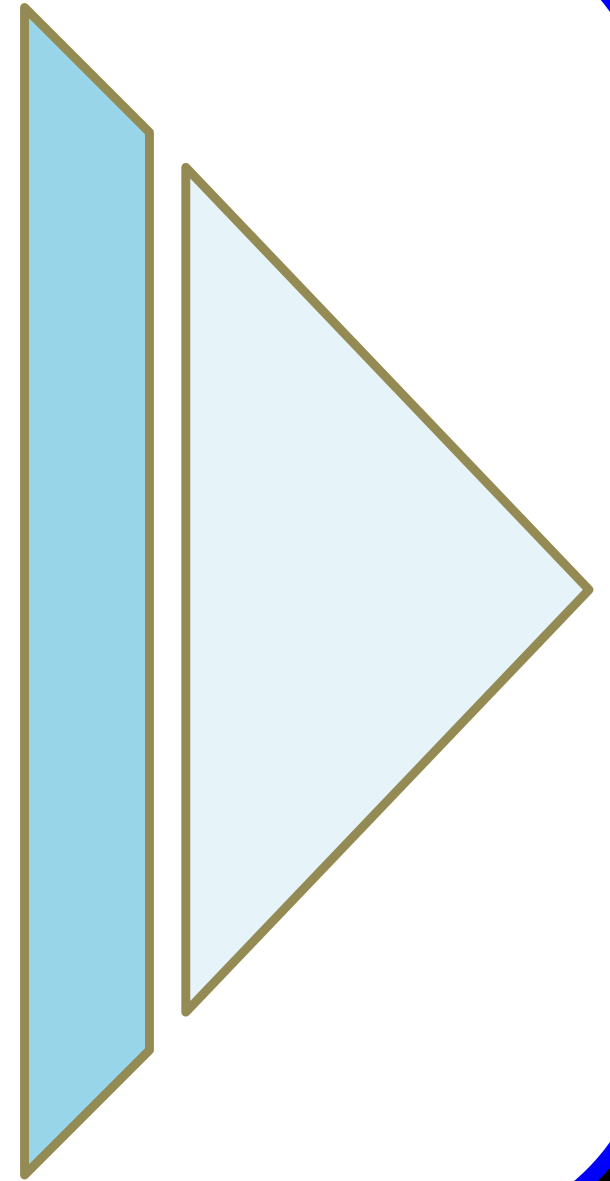
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What we will Learn

Habitat and adaptations

Adaptations for Environment

- Terrestrial Animals :-
 - Polar areas.
 - Mountains.
 - Deserts.
- Aquatic Animals.
- Amphibians.
- Aerial Animals.
- Arboreal animals.



Adaptations in Animals

Habitat

- ❖ The place where an organism naturally lives is called its habitat.

Adaptations

- ❖ The special features required by an organism to adjust itself in a habitat are called adaptations.
- ❖ Like plants, animals also undergo changes to adapt to their surroundings.
- ❖ Look at the pictures and identify the habitat the animals live in:-



Desert

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Forest

.....

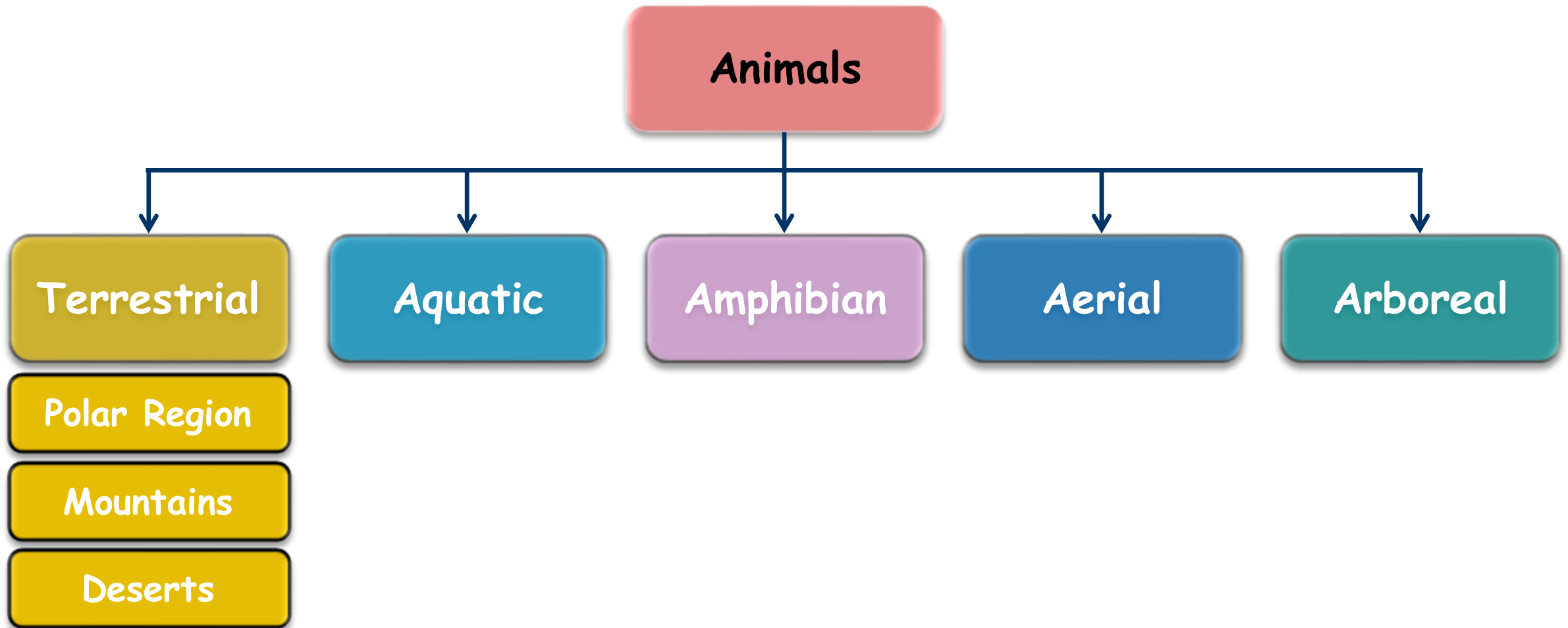


Sea

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Adaptations in Animals

Adaptations to Environments



Adaptations in Animals to Environment

Terrestrial Animals

- ❖ Animals that live on land are called Terrestrial animals.
- ❖ Climatic conditions on land vary from place to place.

Adaptations in Polar Regions

- ❖ Polar regions are **extremely cold**.
- ❖ Examples : Polar bears, arctic foxes, penguins, seals, Belarus etc.
- ❖ These animals have **thick hairy skin**.
- ❖ They also have a thick layer of fat under their skins which is called **blubber**.
- ❖ Due to scarcity of food, animals like bear, frog and snake sleep through the winters.
- ❖ This winter long sleep is called **hibernation**.



Polar Bear



Arctic Fox



Penguin



Belarus



Seal

Adaptations in Animals to Environment

Terrestrial Animals

❖ Adaptations in Mountains

- ❖ Mountains have **very cold** weather.
- ❖ Examples : Sheep, Mountain goat, Yak etc.
- ❖ These animals have **thick fur** on their body.
- ❖ They animals also have **strong hooves** to walk on the slopes.



Sheep



Mountain Goat



Yak

Adaptations in Animals to Environment

Terrestrial Animals

❖ Adaptations in Deserts

- ❖ Deserts have **very hot** weather.
- ❖ Examples : Camels, lizards, snakes etc.
- ❖ These animals have **thick skin and less hair** on their body.
 - ❖ It helps them to prevent water loss from their body.
- ❖ Some animals like snails, lizards and earthworms **sleep** for a long time during summers to escape heat.
 - ❖ This long summer sleep is called **aestivation**.



Camel



Lizard



Snake

Science in Context

Camel

- ❖ Camel is also called a **ship of the desert** because it has adapted to its conditions very well :-
 - ❖ Due to scarce availability of water, it **drinks a lot of water** at a time.
 - ❖ It can stay without water for a long period of time.
 - ❖ **Hump** on its back stores a large amount of fat.
 - ❖ Its **long legs** and **flat hooves** help it to walk easily on the loose sand without sinking in it.
 - ❖ It has **double eyelids** which prevents sand entering into the eyes.



Camel

Adaptations in Animals to Environment

Aquatic Animals

- ❖ Animals that **live in water** are called Aquatic animals.
- ❖ Examples : Fish, whale, turtle, octopus etc
- ❖ Adaptations:-
 - ❖ Most aquatic animals breathe through **gills**.
 - ❖ Fish have **fins** for movement and direction control.
 - ❖ Whales and turtles have **paddle like flippers** for movement.



Fish



Whale



Turtle



Octopus

Adaptations in Animals to Environment

Amphibian

- ❖ Animals that live **both on land and in water** are called amphibians.
- ❖ Examples : Frog, Salamander etc
- ❖ Adaptations:-
 - ❖ Most amphibians have **lungs** to breathe on land and **moist skin** which help them to breathe in water.
 - ❖ Frogs have **well developed hind limbs** which help them to hop on land and together with **webbed feet**, it helps them to swim in water.



Frog



Salamander

Adaptations in Animals to Environment

Aerial Animals

- ❖ Animals that can fly and spend **maximum time in air** are called aerial animals.
- ❖ Examples : Birds, bat, butterfly, dragon fly etc
- ❖ Adaptations:-
 - ❖ They have **hollow bones** which keep their body light.
 - ❖ They have **boat shaped body** to easily fly / glide in the air.
 - ❖ They have **wings and feather** to fly.
 - ❖ Insects have still lighter **paper like wings** which help them fly.



Bird



Bat



Butterfly



Dragon Fly

Adaptations in Animals to Environment

Arboreal Animals

- ❖ Animals that spend majority of their **time on trees** are called arboreal animals.
- ❖ Examples : Monkeys, squirrels, tree lizards, koala bear etc
- ❖ Adaptations:-
 - ❖ They have **strong limbs and sharp claws** which help them to climb trees.
 - ❖ Tail of monkeys help them to hang on the branches of the trees.
 - ❖ **Hairy tail of squirrel** help it to maintain balance and avoid drops.



Monkey



Squirrel



Tree Lizard



Koala Bear

Animals and their young ones

Keywords

Hibernation

Long sleep by some animals during cold winter months.

Aestivation

Long sleep by some animals during summer time.

Aerial Animals

Animals that spend maximum time in air and can fly.

Arboreal Animals

Animals that spend majority of their time on trees.

