

**DATE: 26 SEP 2020**

**SUBJECT : SCIENCE**

**CHAPTER-8:**

**WEATHER, CLIMATE AND ANIMAL ADAPTATION**

**TOPIC-3:**

**ADAPTAIONS & ADAPTATION OF ANIMALS TO COLD  
CLIMATE**

## ADAPTATION

### **Adaptation of Animals to cold climate(polar Bear & Penguin):**

#### **Adaptation:**

certain specific features or habitats that help an organism to survive in an environment are known as adaptation.

#### **Polar regions:**

North pole and south poles are the regions having extremely cold climatic condition. Countries like Canada, Greenland, Iceland, Norway, Sweden, Alaska, Siberian region of Russia are situated in polar region. These places do not receive direct sunlight through out the year and hence too much cold.

#### **Inhabitants in polar region:**

polar bear, penguin, arctic fox, hedgehog etc are some of the animals surviving in these regions because of certain features. Many animals living in Arctic and Antarctic region have small, rounded ears to reduce heat loss and to prevent cold water from entering.

SOME ANIMALS IN POLAR REGION:



Polar Bear



Penguin



of  
les

Walrus



Arctic Fox





POLAR BEAR



HEDGEHOG



## HUDDLING OF PENGUINS FOR KEEPING BODIES WARM



**Polar bear:** It has the following adaptive features to live in polar region

- It has thick fur over its body
- It has two layers of fats (**blubbers**) under its skin which keep its body warm.
- It has a white appearance-that help it to catch prey on the snow and ice
- It has excellent sense of smell and hearing which help it to catch prey.
- It has thick sand paper like paws which help them run on the slippery ice
- polar bears are very good swimmers and divers, which help them swim and thus it finally help them to catch prey

**Penguin:** It has some features that helps it to survive in the cold climatic condition in polar regions.

- Its back is dark and front is white in colour helps it blend in with the background from above and below when in water.
- its thick skin and lot of fat protect it from cold.
- They huddle together in groups to keep themselves warm.
- They have webbed feet and streamlined bodies that help them to move through water easily.
- Penguin can drink sea water.
- They have special glands near their beak that help to excrete excess salt



### ARCTIC FOX:

- It has white thick fur coat: protects from cold and it is hard for predators to locate it against snow background.
- it has thick hair on the soles of its feet that help to keep their feet warm and also help them to walk on snow

### Walrus:

it does not have external ear flaps. They hear through tiny holes at the sides of their head. It lives mostly in shallow waters in the sea ice. This animals are long-lived, social animals and are Found in arctic marine region.

### QUESTIONS: HOME ASSIGNMENT

1. What do you understand by adaptation?
2. What the temperature of polar region in winter?
3. Name any five countries of the world that falls under polar region.
4. Name any four animals that are found to survive in polar region.
5. what do you mean by camouflage and blubbers.
6. Explain how a penguin keeps itself warm.
7. How does polar bear gets adapted in polar region?
8. Write any two features of Arctic foxes that help it to survive it in polar region.
9. What do you mean by hibernation? Give any two examples of hibernating animals?
10. What is called migration of animals? What is the purpose of migration?