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<u>STUDY NOTES</u> CLASS- VII (All Section) Teacher's Name: Anjani Kaushik DATE: 23-06-2020

SCIENCE LESSON-07

CHAPTER: Weather, Climate an Animal Adaptation Today's Topic: Climate and adaptation

Polar bears live in the Arctic. They do not stay in one place. They travel across the snow looking for food. Sometimes they swim far out into the sea. The bear's large feet are like snowshoes. The hair on the soles of their feet help the bears walk on the slippery ice and snow. A polar bear can travel 30 km or more per day for several days, although some are capable of much more than that.

A polar bear has black skin, which aids its adjustment to the Arctic temperature, absorbing and holding heat from the sunlight. To conserve the heat, it has a thick layer of fat and dense white fur, which provide efficient insulation. The white fur not only protects the animal from the Arctic cold but also makes it almost invisible in the white snow. The animal swims well, using its broad forepaws as paddles. To help it remain under water for long durations, the polar bear keeps its nostrils closed and lays its small ears flat. The polar bear has a keen sense of smell. It can easily smell a whale carcass 32 km away or seals up to 2 m beneath the snow and ice.

Another well-known animal living in the polar region is the penguin. Most penguins live in the Antarctic, where it is extremely cold, and the water temperatures never rise above freezing point. Similar to polar bears, penguins that live in the polar regions also have a thick skin and a lot of fat to protect them from the cold. In severe winter, the emperor penguins use a novel method to keep warm; they huddle together. They keep their young ones warm by sheltering them between their furry feet. The bodies of penguins at streamlined and their feet have webs, making them good swimmers.

Some penguins live further north, but all penguins live in the southern hemisphere. All penguins are flightless. They cannot fly at all. Their wings are known as flippers.

Apart from polar bears and penguins, the polar region is also home to many other species of animals and birds including the musk ox, foxes, reindeers, whales fishes.

While fishes and whales can live in water, the other animals live on land during the polar winter; while birds migrate to warmer regions during winters.

Every year, during the winter in the north polar region, it is warmer in countries such as India. Hence, hundreds and thousands of migratory birds come to India for the winter months, to lakes and wetlands spread throughout the country. Bharatpur in Rajasthan, Kumarakom in Kottayam (Kerala), the Rann of Kutch in Gujarat and Sultanpur in Haryana are among the famous bird sanctuaries where these birds spend the winter.

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