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Animals and Their Varying Lifestyles

SPECIFIC OBJECTIVES

The students learn about

- ❖ habitat and adaptations
- ❖ varying adaptations in animals – adaptations for breathing, movement and feeding
- ❖ migration and some migratory animals

TEACHING AIDS

Pictures/chart/animations on gaseous exchange in microbes, land animals (through lungs), fish (through gills), frog (through skin, lungs), insects (through spiracles); movement in different animals (as given in chapter); teeth of herbivores, omnivores, teeth and claws of carnivores, beaks of herbivorous birds, beaks and claws of carnivorous birds, prey catching by frog, eagle, feeding butterfly; birds flying in V-shaped group, world map, bat, whale, eel, salmon.

LESSON PLAN

- ❖ Teacher will start the chapter by asking some simple questions about the places where different animals live.
- ❖ Now, teacher will define the terms 'habitat' and 'adaptations' and explain that animals are adapted to live in different types of environments.
- ❖ Now, teacher will explain adaptations in different body functions of animals (as given in chapter).
 - **Adaptations for Breathing:** With the help of teaching aids, teacher will explain the gaseous exchange in microbes, land animals, aquatic animals, amphibians and insects (as described in chapter).
 - **Adaptations for Movement:**
 - ❑ With the help of teaching aids, teacher will explain the movement in land animals, aquatic animals and aerial animals (as given in chapter).
 - ❑ Teacher will also explain that some animals have two modes of movement, e.g., frog hops on land but swims in water, duck and penguin walk on land but swim in water.
 - ❑ Teacher will tell that animals like emu, ostrich, rhea, cassowary and kiwi are called birds because they have all features of birds except flying. Therefore, they move by walking.

- **Adaptations for Feeding:** With the help of teaching aids, teacher will explain
 - ❑ the length of digestive system and shape of teeth of an animal depend on the type of food it eats.
 - ❑ feeding organs of herbivorous, carnivorous and omnivorous animals and how they help animals in getting their food.
 - ❑ carnivores like lion, tiger, etc. have strong sense of smell and carnivorous birds like eagle have sharp eyesight.
 - ❑ frog has sticky tongue that helps it in catching its prey.
 - ❑ insects like butterfly have sucking type of mouthparts called proboscis that help them feed on liquid food.
- ❖ Now, to check the understanding of students about the topic, teacher will ask them to solve 'Checkpoint 1'.
- ❖ Now, teacher will define migration and its need among animals. With the help of teaching aids, teacher will explain that some migratory birds fly in V-shape. Teacher will give the examples of some birds and fishes (as given in chapter) and on world map will show their native as well as migratory places.
- ❖ Now, teacher will ask the students to solve 'Checkpoint 2'.
- ❖ At last, teacher will make students revise the new terms given in 'Science Vocabulary' and sum up the lesson by going through the points given in 'Wrapping it up'.
- ❖ Now, teacher will help students to solve the questions given in 'Exercises'.

BOOST UP

- ❖ Teacher should encourage students to carry out activities given in the chapter.
- ❖ Teacher should discuss the conversation of Annu and Mannu given in bubbles in between the topics.
- ❖ Teacher should discuss the information given in the 'Knowledge Desk' at various places in the chapter.
- ❖ Teacher should help students to find the answers of questions given in 'Think Zone' and encourage to do activities or projects given in 'Beyond the Text'.
- ❖ Teacher should also discuss the facts given in 'Interesting Information' section.
- ❖ Teacher should encourage students to watch National Geographic and Discovery channels.

EXPECTED LEARNING OUTCOMES

The students

- ❖ understand about habitat and adaptations
- ❖ know about various adaptive features in animals for breathing, movement and feeding.
- ❖ understand about migration, its causes and need.
- ❖ know about some migratory birds and animals and their migratory routes.

EVALUATIVE QUESTIONS

The teacher may ask the following questions for evaluating the understanding of students.

1. What is habitat?
2. What do you mean by adaptations?
3. What are the breathing organs of insects called?
4. How does cockroach move?
5. What is locomotion?
6. What are cilia? What is their use?
7. Name some flightless birds.
8. Why do rabbit and deer have large incisors?
9. Which animals migrate?
10. Why do eel and salmon migrate?