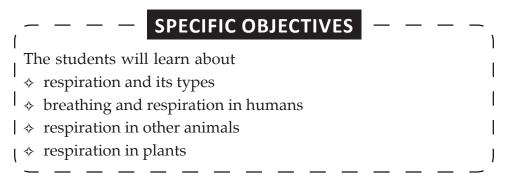
LESSON PLAN



TEACHING AIDS

Pictures/charts/models/animations on a cell showing respiration; respiratory organs of humans; structure of alveoli; changes in the chest cavity during inhalation and exhalation; earthworm, tracheal system of cockroach; gills of fish; stomata on leaves, lenticels on old woody stem, root hair in soil.

LESSON PLAN

- ♦ Teacher will start the chapter by going through the points given in 'Know these points before you start' section.
- ♦ Teacher will describe the process of respiration as a biochemical process.
- ♦ Teacher will describe the types of respiration, i.e., aerobic and anaerobic respiration.
- ♦ Now, teacher will ask students to solve Check Point 1.
- ♦ Teacher will explain respiratory system in humans.
- ♦ Teacher will describe the process of breathing in humans by explaining mechanism of inhalation and exhalation and will demonstrate the related activity given in the chapter.
- ♦ Teacher will explain the process of external, internal and cellular respiration.
- ♦ Teacher will ask students to solve Check Point 2.
- Now, teacher will explain the process of respiration in other animals earthworm, cockroach and fish (as given in the chapter).
- ♦ Teacher will discuss the process of respiration in plants and describe different parts of plant which carry out respiration.

- ♦ Now, teacher will ask students to solve Check Point 3.
- ♦ Teacher will make students revise the new terms given under the head 'Know These Terms'.
- Finally, teacher will help students to solve the questions given in exercises under the head 'Practice Time' and 'Think Zone'.

BOOST UP

- ♦ Teacher should demonstrate and explain activities given in the chapter.
- ♦ Teacher should discuss the information given under the head 'Something More'.
- ♦ Teacher should discuss the conversation of Annu and Mannu given in between the topics.
- ♦ Teacher should encourage students to watch Discovery, National Geographic and Animal Planet channels to know more about plants and animals.

EXPECTED LEARNING OUTCOMES

The students know about

- ♦ aerobic respiration and anaerobic respiration.
- ♦ respiratory system and breathing process in humans.
- ♦ respiration in earthworm, insects and fish.
- ♦ parts of plants which take part in respiration.

EVALUATIVE QUESTIONS

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

- 1. Define respiration.
- 2. Why do living beings respire?
- 3. Mention the differences between aerobic and anaerobic respiration.
- 4. What is meant by breathing?
- 5. How many times does a normal human breathe?
- 6. What is the key difference between external and internal respiration?
- 7. Name the respiratory organs of earthworm, frog, cockroach and fish.
- 8. Which parts of plants take part in respiration?