

LESSON PLAN

SPECIFIC OBJECTIVES

The students will learn about

- ✧ respiration and its types
- ✧ respiration in humans
- ✧ breathing in humans
- ✧ respiration in other animals
- ✧ respiration in plants

TEACHING AIDS

Pictures/charts/models/animations on respiratory organs of humans; structure of alveoli; changes in the chest cavity during inhalation and exhalation; tracheal system of cockroach; gills of fish; stomata on leaf surface.

LESSON PLAN

- ✧ The teacher will start the lesson with 'Science Vocabulary' section by telling the meaning/definition of new terms which are used in the chapter.
- ✧ The teacher should describe process of respiration as a biochemical process.
- ✧ The teacher should describe the types of respiration, i.e., aerobic and anaerobic respiration and their features.
- ✧ The teacher should explain respiratory system and process of respiration in humans.
- ✧ The teacher should describe the process of breathing in humans by explaining mechanism of inhalation and exhalation.
- ✧ The teacher should demonstrate Activity 1.
- ✧ The teacher should make students to perform Activities 2 and 3.
- ✧ Now, the teacher should explain the process of respiration in cockroach and fish.
- ✧ The teacher should discuss the process of respiration in plants and also the respiration occurring in leaves and stems of plant.
- ✧ Students should be asked to solve 'Check Points' 1, 2 and 3.

- ✧ The teacher will help the students to solve the questions given in exercises under the head 'Let's Drill Our Skills' and to complete the flowchart given under the head 'Let's Memorise'.

BOOST UP

- ✧ Students should be encouraged to perform Activity 1 at their own for a clear understanding of mechanism of breathing – inhalation and exhalation.
- ✧ Students should be asked to learn the facts given in 'Beyond the Horizon'.

EXPECTED LEARNING OUTCOMES

The students know about

- ✧ process of respiration and its types.
- ✧ respiratory system and breathing process in humans.
- ✧ respiration in other animals.
- ✧ respiration in plants and 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. What does respiration involve?
3. Mention the differences between aerobic and anaerobic respiration.
4. How do human beings respire?
5. What is meant by breathing?
6. How many times does a normal human breathe?