

# 6

## Health and Diseases

### LESSON PLAN

#### SPECIFIC OBJECTIVES

The students learn about

- ✧ good health and unhealthy condition of body
- ✧ causes and types of diseases and their prevention
- ✧ immunity and vaccination
- ✧ diseases due to nutrient deficiency, over-nutrition and wrong food habits

#### TEACHING AIDS

**Pictures/charts/models/animation** on different types of disease-causing bacteria, how different types of microorganisms cause disease and various diseases caused by them (as given in chapter); how communicable diseases spread (as given in chapter); prevention of communicable diseases (as given in chapter); deficiency diseases and related nutrients (as given in chapter); an obese child showing difficulty in sitting, standing, walking and running, etc.; people showing some wrong food habits (as given in chapter); **model/specimen** of microscope

#### LESSON PLAN

- ✧ Teacher will start the lesson with ‘Science Vocabulary’ section by telling the meaning/definition of new terms which are used in the chapter.
- ✧ Teacher will define the terms ‘good health’ and ‘disease’.
- ✧ Now, teacher will define that disease-causing microorganisms are called germs and with the help of teaching aids, will explain how these germs cause diseases.
- ✧ Teacher will also show the picture/chart/animation on different types of disease-causing bacteria.
- ✧ Teacher will also explain that these germs are so tiny that we cannot see them with naked eye. We can see them with the help of a microscope only.
- ✧ With the help of teaching aids, teacher will discuss about some diseases and their respective microorganisms (as given in the chapter).
- ✧ Now, teacher will discuss about types of diseases:
  - Communicable or infectious diseases
  - Noncommunicable or noninfectious diseases

- ✧ With the help of teaching aids, teacher will explain that communicable diseases spread through direct contact, air, contaminated food and water, animal bites and insects. Teacher will also discuss about agents that spread communicable diseases (as given in the chapter).
- ✧ With the help of teaching aids, teacher will discuss how communicable diseases can be prevented (as given in the chapter).
- ✧ Teacher will discuss the terms ‘immunity’, ‘vaccine’, ‘vaccination’ and will explain that some communicable diseases such as polio, tetanus, can be prevented by vaccination.
- ✧ Now, to check the understanding of students about the topic, they will be asked to solve ‘Check Point 1’.
- ✧ Next, teacher will discuss that noncommunicable diseases are caused due to nutrient deficiency, over-nutrition, wrong food habits or poor functioning of some body part.
  - ▮ Diseases due to deficiency of nutrients
    - Teacher will explain that deficiency diseases are caused mainly due to vitamin and mineral deficiency in the body. With the help of teaching aids, teacher will discuss about diseases due to deficiency of vitamins A, B, C, D, E, K and minerals iron, calcium, iodine, phosphorus, sodium and potassium (as given in chapter).
    - Teacher will also discuss the various sources of these vitamins and minerals so that deficiency diseases can be prevented.
  - ▮ Diseases due to over-nutrition
    - Teacher will discuss the term ‘over-nutrition’ and explain that obesity is due to excess of carbohydrates and fats in the body.
    - Teacher will also discuss how obesity can be cured.
  - ▮ Diseases due to wrong food habits
    - Teacher will discuss that some diseases such as obesity are due to wrong food habits also.
    - Teacher will define hypervitaminosis and explain it is due to excess of vitamin A, D, E and K (fat-soluble vitamins) in the body.
- ✧ Now, teacher will ask students to solve ‘Check Point 2’.
- ✧ The teacher will sum up the chapter by going through the points given under the head ‘Wrapping it up’.
- ✧ Finally, the teacher will help students to solve all the questions given in the ‘Exercises’.

### **BOOST UP**

- ✧ Teacher should encourage students to write some more ways to prevent themselves from communicable diseases.

- ✧ Students should learn the names of infectious and noninfectious diseases.
- ✧ Students should learn the name of vitamins and minerals, their sources, functions and their deficiency diseases.

### **EXPECTED LEARNING OUTCOMES**

The students

- ✧ can differentiate between healthy and unhealthy conditions of the body.
- ✧ can differentiate between communicable and noncommunicable diseases.
- ✧ know how to prevent communicable diseases.
- ✧ know about vaccine and immunity.
- ✧ know about noncommunicable diseases, their causes and remedies.

### **EVALUATIVE QUESTIONS**

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

1. What is good health?
2. What is a disease?
3. What are germs?
4. What is a microscope?
5. Why can germs not be seen with naked eye?
6. What is a vector? Name the most common vectors.
7. Which is a natural disinfectant?
8. What is a vaccine?
9. What is scurvy? How it is caused?
10. What is obesity?