

# Science Booster 3

## 1

## Living and Nonliving Things

### LESSON PLAN

#### SPECIFIC OBJECTIVES

The students learn about

- ✧ natural and man-made things
- ✧ living and nonliving things
- ✧ features of living things

#### TEACHING AIDS

**Pictures/animation** on a dog and a puppy/ a cat and a kitten /a baby plant and a young plant; **Pictures/animation** on birds flying, fish swimming; **Animation/pictures samples** of touch-me-not plant, sunflower; **Picture/animation** on hatching of chick, germination of seed, sprouting of potato, etc.; **Pictures** of lungs in chest of man, air holes of insects, gills of fish, stomata on leaves and **animation** on breathing action

#### LESSON PLAN

- ✧ Teacher will start the lesson with 'Gear Up' section by asking questions on living and nonliving things based on previous knowledge of students. Teacher will help the students to answers the questions asked in this section.
- ✧ Now, teacher will explain the differences between natural and man-made things giving various examples from everyday life.
- ✧ Teacher will add some more points to the understanding of students on living and nonliving things by explaining that natural things such as plants and animals are living things, whereas rest of the things (whether natural or man-made) are nonliving things.
- ✧ With the help of different teaching aids, teacher will explain all the features of living things and nonliving things that are given in the chapter.

#### **Growth**

- ▮ By showing pictures of examples given in chapter, also mentioned in teaching aids, teacher will explain that all living beings grow.

- ▶ Teacher will ask students to collect their photographs and will help to perform Activity 2 given in the chapter.
- ▶ By giving examples from everyday life, teacher will also explain that nonliving things do not grow.

### **Movement**

- ▶ Teacher will explain that all living beings move. Teacher will give example of own that we move by walking with the help of legs. Similarly, other animals like dog, cat, monkey, etc. move with legs. Teacher will show animation/pictures of birds flying, fish swimming and explain that birds move by flying with the help of their wings and fish swim with their fins.
- ▶ Teacher will explain that unlike animals, plants cannot change their place but they move their parts. Teacher will show pictures/animation of touch-me-not plant and sunflower or if sample of touch-me-not plant is available, will demonstrate the movement of its leaflets on touching.
- ▶ By taking the example of any nonliving object such as chair, table, tiffin box, pencil box, school bag, pen, pencil, etc., teacher will demonstrate that nonliving things do not move at all.
- ▶ Teacher can also perform Activity 3, given in the chapter under the head 'Movement'.
- ▶ To check the understanding of students about the topic/concept, teacher will ask them to solve Check Point 1.

### **Need for food**

- ▶ Now, teacher will explain that all living things need food to grow and live. By giving examples of dog and puppy, cat and kitten, baby plant and young plant, teacher will explain they grow by eating food (showing their pictures/animation). Teacher will also give example of own that we grow from baby to young by eating food.
- ▶ Teacher will explain that plants can make their food.
- ▶ Teacher will explain that nonliving things do not need food.

### **Reproduction**

- ▶ First, teacher will define the meaning of reproduction and then explain that all living beings produce babies, by giving examples and showing animation/ picture of dog and puppy, cat and kitten, hatching of chick, germination of seed, sprouting of potato, etc.
- ▶ Teacher will also explain that nonliving things do not reproduce.

### **Feeling**

- ▶ Teacher will explain that we feel our surroundings by looking, smelling, touching, listening and can taste the food by tasting. Teacher will give examples from everyday life and those given in the chapter.
- ▶ Teacher can perform an activity in the class and ask students to touch some objects around them. They will write the name of object (such as table, school

bag, book, water bottle, tiffin, etc.) and how it feels (such as hot/cold, soft/hard, rough/smooth).

- ▶ Teacher will explain that nonliving things do not feel their surroundings.

### **Need to breathe**

- ▶ First teacher will make students perform Activity 4, given in the chapter under the head 'Need to breathe'.
- ▶ Now, teacher will explain that they feel air coming out of their nose because of breathing as all living beings breathe.
- ▶ Teacher will explain that all living beings have breathing organs. We have lungs. Similarly, dog, cat, cow, horse, etc. also have lungs. Fish have gills, insects have air holes and plants have stomata on leaves to breathe.
- ▶ Teacher will also explain that all living beings take oxygen from air and expel carbon dioxide in the air.
- ▶ Teacher will explain that nonliving things do not breathe.

### **Excretion**

- ▶ Teacher will explain the meaning of excretion.
- ▶ Teacher will explain that nonliving things do not excrete.
- ✧ Now, the teacher will ask the students to solve the Check Point 2.
- ✧ The teacher will sum up the chapter by going through the points given under the head 'Wrap up now'.
- ✧ Finally, the teacher will help students to solve all the exercises given under the head 'Practice Time'.

### **BOOST UP**

- ✧ Teacher can display a baby plant and its seed to explain the concept of **growth** and **reproduction**.
- ✧ If possible, an aquarium can be displayed or students can be taken to a fish pond for showing the **movement** of fish. The bubbles of carbon dioxide gas come out during **breathing**.
- ✧ Teacher can encourage students for having healthy eating habits while explaining the concept of **growth** and **need of food** in living beings.
- ✧ Teacher can add more examples to the list of names of young ones while teaching about **reproduction**.
- ✧ Teacher can elaborate the information given in 'Knowledge Desk' under the head 'Need to breathe' by showing related pictures/animation while teaching about breathing.

### **EXPECTED LEARNING OUTCOMES**

The students

- ✧ understand natural and man-made things.

- ✧ know features of living and nonliving things.
- ✧ can differentiate between living and nonliving things.

### **EVALUATIVE QUESTIONS**

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

1. What are natural and man-made things?
2. What are nonliving things?
3. How do different living things breathe?