

# Heavenly Bodies

## SPECIFIC OBJECTIVES

The students learn about

- space, stars, constellations, the sun, the moon, planets and the solar system
- different features of earth
- a satellite

## TEACHING AIDS

Animation/pictures/charts on different constellations, the sun, the moon, phases of moon, surface of moon, the earth, movements of the earth; Pictures of some astronauts and spacecrafts; Globe

## LESSON PLAN

- Teacher will start the chapter by asking simple questions on stars, the sun, the moon, etc. based on previous knowledge of the students.
- Now, teacher will ask the students to fill in the answer in 'Warm Up' section.
- Teacher will introduce the term 'Space' and explain it by giving the idea that everything is a part of this vast area called space.
- Now, teacher will explain who astronauts are and show pictures of some astronauts emphasising on those from India.
- Similarly, teacher will explain what a spacecraft is and show pictures of different spacecrafts.
- Now, teacher will explain about stars that what stars are, why they look small, why they shine, etc.
- Teacher will give a simple idea of constellation with the examples given in the chapter (using teaching aids).
- Teacher will add some more points to the knowledge of students about the sun by making them understand that it is the ultimate source of energy on the earth (using teaching aids).
- Using teaching aids, teacher will explain features of moon, phases of moon, tell what a satellite is and make students understand that moon is the natural satellite of the earth.
- Teacher should also explain about artificial satellites using the information given in 'Knowledge Zone' in the chapter.

- Teacher will also explain why moon has no life on it.
- Teacher will explain about planets and using teaching aids, will tell the similarity between the moon and the planets that both move around the sun.
- Using teaching aids, teacher will make understand about solar system and its members in a simple manner.
- To evaluate the understanding of topics, teacher should ask students to solve 'Checkpoint 1'.
- Teacher will add to the knowledge of students by explaining more features of the earth.
- By showing a globe, teacher will tell about the shape of the earth as given in the chapter.
- Teacher should explain the terms atmosphere and poles in a simple way.
- Teacher will explain the features that make the earth a liveable planet (considering the class level of students).
- With the help of globe, teacher will explain the two movements of the earth.
- To check the understanding of the students regarding chapter, teacher will ask them to solve 'Checkpoint 2'.
- At last, the teacher will make students revise the new terms given under the head 'Remember These Terms' and sum up the lesson by going through the points given under the head 'At One Go'.

## BOOST UP

- Teacher can ask students to collect pictures of different constellations, planets and astronauts and paste them in their scrapbooks. They should write the name below each picture.
- Teacher can explore NASA website and download useful information, pictures related to heavenly bodies and space.

## EXPECTED LEARNING OUTCOMES

The students

- understand about space, astronauts and spacecraft
- know more features of stars, the sun, the moon and the earth
- know about satellites

## EVALUATIVE QUESTIONS

The teacher may ask the following questions for evaluating his/her students.

1. What is space?
2. What are heavenly bodies? Name them.
3. What is the difference between a star and a planet?
4. What is the difference between a planet and a satellite?
5. Why is there no life on the moon?
6. What are revolution and rotation of the earth?