

Heavenly Bodies in Outer Space

SPECIFIC OBJECTIVES

- | The students learn about
- | ❖ space, stars and constellations
- | ❖ the sun and the moon
- | ❖ people who have gone into space

TEACHING AIDS

Animation/pictures/charts on different constellations, the sun, the moon, surface of the moon, Pictures of some astronauts and spacecrafts.

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.
- ❖ 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.
- ❖ Teacher will add 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 the moon, and make students understand that moon is the natural satellite of the earth.
- ❖ Teacher will also explain why moon has no life on it.
- ❖ Now, teacher will explain 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).
- ❖ To check the understanding of the students regarding chapter, teacher will ask them to solve 'Checkpoint'.

- ❖ At last, teacher will make students revise the new terms given in 'Science Vocabulary' and sum up the lesson by going through the points given in 'Wrapping it up'.
- ❖ Now, teacher will help students to solve the questions given in 'Exercises'.

BOOST UP

- ❖ Teacher should encourage students to carry out activities given in the chapter and discuss the information given in the 'Knowledge Desk'.
- ❖ Teacher should discuss the conversation of Annu and Mannu given in bubbles in between the topics.
- ❖ Teacher should help students to find the answers of questions given in 'Think Zone'.
- ❖ Teacher should also discuss the facts given in 'Interesting Information'.
- ❖ Teacher can ask students to collect pictures of different constellations and astronauts, and paste them in their scrapbooks. They should write the name below each picture.
- ❖ Teacher can explore websites of NASA and ISRO 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 constellations
- ❖ know about people who went into space

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 a star?
4. What is a crater?
5. Why is there no life on the moon?