

## LESSON PLAN

**SPECIFIC OBJECTIVES**

The students will learn about

- ✧ night sky
- ✧ the moon, its surface and phases
- ✧ stars
- ✧ constellation
- ✧ the solar system
- ✧ the sun, the planets
- ✧ artificial satellites

**TEACHING AIDS**

**Pictures/charts/models/animations** on phases and surface of the moon; polestar; Ursa Major, different position of Ursa Major around pole star, Ursa Minor, Orion, Cassiopeia solar system and its planets; rotation of earth on its tilted axis; asteroid belt; meteor; comet, different positions of comet around the sun, some artificial satellites.

**LESSON PLAN**

- ✧ The teacher should start the chapter with Gear Up and ask students the questions given in this section.
- ✧ The teacher should define the features of night sky and discuss the features of the moon demonstrating Activity 1.
- ✧ The teacher should define the features of phases of the moon.
- ✧ The teacher should describe stars and demonstrate Activity 4.
- ✧ The teacher should describe constellation and discuss about some constellations.
- ✧ The teacher should discuss solar system and other important members of solar system which are asteroids, meteors, meteorites and comets.
- ✧ The teacher should discuss about artificial satellites and their applications.
- ✧ The teacher should ask the students to solve Check Points 1, 2 and 3,

- ✧ At last, the teacher will sum up the lesson by going through the points given under the head 'Wrap Up Now'.
- ✧ The teacher will help the students to solve all the questions given in exercises under the head 'Practice Time' and will also discuss the topics given under the head 'Formative Tasks'.

### **BOOST UP**

- ✧ The teacher should ask students to explore differences between natural and artificial satellites.
- ✧ The teacher should assign Activities 2 and 3 as home assignment and discuss the results in the class.
- ✧ The teacher should ask students to explore some more names of constellations, other than those given in the book.

### **EXPECTED LEARNING OUTCOMES**

The students know about

- ✧ heavenly bodies.
- ✧ features of the moon, its surface and phases.
- ✧ stars and pole star.
- ✧ constellations.
- ✧ solar system and its planets.
- ✧ asteroids, meteors, meteorites and comets.
- ✧ artificial satellites and their applications.

### **EVALUATIVE QUESTIONS**

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

1. Define heavenly objects.
2. What is the difference between waxing and waning moon?
3. What is meant by lunar month?
4. How many planets does the solar system have?
5. Why is change in seasons on the earth caused?
6. Write the differences between meteors and meteorites.
7. Explain artificial satellites.