

SPECIFIC OBJECTIVES

- The students learn about
- ❖ weather and climate
 - ❖ role of the sun in changing weather
 - ❖ formation of sea breeze and land breeze

TEACHING AIDS

Pictures/animation/cuttings of weather reports and weather forecasts from different newspapers; Sunny and cloudy weather, hot/cold desert (for defining climate and weather); Patterns of sunrays falling on the earth at noon, in morning and evening; Formation of sea breeze and land breeze.

LESSON PLAN

- ❖ The teacher will start the chapter by discussing the conversations of people given in the beginning of the chapter.
- ❖ Now, teacher will show some cuttings of weather reports and weather forecasts and discuss the information they provide and their utility.
- ❖ Teacher will also explain the role of a meteorologist in preparing weather report and weather forecasting.
- ❖ Teacher will define the terms weather and climate that weather is a temporary state of atmosphere at a particular place and time, whereas climate is an average weather condition at a particular place but over a long period of time.
- ❖ Teacher will define the term 'temperature'.
- ❖ Now, with the help of teaching aids, teacher will explain the role of sun in weather change telling that morning and evening are cooler than noon because of pattern of sunrays falling on the earth.
- ❖ Then, teacher will discuss about climate.
- ❖ To check the learning of students, teacher will ask them to solve 'Checkpoint 1'.
- ❖ Now, teacher will discuss about air, its composition and its importance.
- ❖ Teacher will demonstrate the activities (as given in chapter) in the class to explain the facts that air expands on heating, becomes lighter and rises up, and land gets heated and loses heat faster than water.

- ❖ With the help of teaching aids and combining the two facts, teacher will explain the formation of sea breeze and land breeze.
- ❖ Now, to check the understanding of students about the chapter, teacher will ask them to solve 'Checkpoint 2'.
- ❖ 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.
- ❖ Teacher should discuss the conversation of Annu and Mannu given in bubbles in between the topics.
- ❖ Teacher should discuss the information given in the 'Knowledge Desk'.
- ❖ Teacher should help students to find the answers of questions given in 'Think Zone' and encourage to do activities or projects given in 'Beyond the Text'.
- ❖ Teacher should also discuss the facts given in 'Interesting Information' section.
- ❖ Teacher should make clear that desert does not mean hot and dry climate only but very cold and dry climate also makes a place desert. So there are hot as well as cold deserts in the world.
- ❖ Students should be encouraged to find out the names of some more hot and cold deserts.
- ❖ Students should be asked to collect weather reports of one week of four big cities from each zone of the country. Teacher should help students to find the differences among them.
- ❖ Teacher should display a thermometer and by giving simple brief idea about its two scales, i.e., degree celsius and degree Fahrenheit, would show how body temperature is measured with it. Teacher should also explain to the students that the thermometer used for measuring body temperature is called clinical thermometer.
- ❖ Students should be encouraged to collect the pictures of some beaches of the country.

EXPECTED LEARNING OUTCOMES

The students

- ❖ understand about weather, weather report and climate.
- ❖ can differentiate between weather and climate.
- ❖ know the role of the sun in changing weather.
- ❖ understand the formation of land and sea breezes.

EVALUATIVE QUESTIONS

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

1. What is weather?
2. What is a meteorologist?
3. Why are mornings and evenings cooler than noon?
4. When do sea breeze and land breeze blow?