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Weather, Climate and Adaptations

LESSON PLAN

SPECIFIC OBJECTIVES

The students will learn about

- ✧ weather and its elements
- ✧ weather forecast and its benefits
- ✧ climate and determining the climate of a place
- ✧ geographical factors affecting the climate
- ✧ adaptations in animals to different climates

TEACHING AIDS

Pictures/charts/models/animations on maximum-minimum thermometer, rain gauge, hygrometer, anemometer, weather station, wind vane; different temperature zones of the earth; locations of tropical rainforests on map; migratory birds; polar bear, penguin and camel.

LESSON PLAN

- ✧ The teacher should start the chapter with 'Gear Up' and discuss the questions given in this section.
- ✧ The teacher should define weather and its different elements.
- ✧ Teacher should describe how different elements of weather affect it and how they are measured. Teacher should also discuss the instruments which are used to measure elements of weather.
- ✧ Teacher should define weather forecast, the information it gives and its benefits.
- ✧ Teacher should define climate and should also describe how to determine the climate of a place.
- ✧ The teacher should discuss the various geographical factors affecting the climate of a place.
- ✧ Teacher should define adaptation and discuss the adaptations found in animals to different climates, i.e., in polar regions, in tropical rainforests, in hot deserts, etc.
- ✧ 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

- ✧ Teacher should give Activity 1 as home assignment to students for a clear understanding of weather reports and weather forecast and ask them to discuss its conclusions in the class.
- ✧ Teacher should give Activity 2 as home assignment for a clear understanding of temperature zones of the world. Students should be encouraged to gather information on plants, animals, people's lifestyles and name of countries falling in each temperature zone.
- ✧ Students should be encouraged to collect pictures of the instruments used to measure weather elements.

EXPECTED LEARNING OUTCOMES

The students know about

- ✧ weather and its elements.
- ✧ weather forecasting and its benefits.
- ✧ climate and determination of climate of a place.
- ✧ geographical factors affecting the climate of a place.
- ✧ adaptations in animals to different climates, i.e., polar regions, tropical rainforests and hot deserts.

EVALUATIVE QUESTIONS

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

1. Define weather and mention its elements.
2. What is meant by weather forecasting?
3. Mention the benefits of weather forecasting.
4. How can we determine the climate of a place?
5. Explain the geographical factors which affect the climate.
6. Mention the adaptations in animals living in deserts.
7. How do polar bears cool themselves on warm sunny days?