

# 6

## Major Landforms

### Lesson Plan

#### Contents

- ▶ An overview of major landforms
- ▶ Understanding the different types of landforms

#### Objectives

- ▶ To understand the landforms on the Earth
- ▶ To learn about mountains, plateaus and plains
- ▶ To know about the different types of mountains, plateaus and plains
- ▶ To appreciate the value of the different landforms and where they are found

#### Teacher's Aids

- ▶ Globe
- ▶ Pictures, atlas and wall maps
- ▶ Blackboard
- ▶ Internet

#### Tips for Teacher

- ▶ Explain the landforms and point them out on maps.
- ▶ Use the internet and films to show satellite images and photographs of the Earth to show locations of the landforms mentioned.
- ▶ Use a detailed wall map to explain where and how landforms are created and how they help us.
- ▶ Students should be encouraged to know places, locations and their placement on the maps.

#### Background and Reading

- ▶ Read the lesson aloud and explain, sharing the aids, etc., pausing to examine and explain the data in the pictures and maps.
- ▶ Particularly focus on the location of the various landforms on the maps as well as the atlas.

## Landforms

- ▶ Continents [landmasses] and oceans [water bodies] have been dealt with in Chapter 5.
- ▶ Mountains, plateaus and plains are the other landforms now being discussed.

## Mountains

- ▶ Elevated parts of the Earth, at least 600 metres higher than the surrounding areas, steep slopes, sharp ridges or peaks. Variable structures and ages: Young like the Himalayas or old like the Aravallis. Types, depending on mode of formation:
  - (i) Fold Mountains—most common; sedimentary rocks folded by compression; largest area and highest peaks. [Himalayas, Andes, Rockies, Alps]
  - (ii) Block Mountains—horizontal tensional forces pull rocks in two directions, causing movement along faults; steep slopes; flat tops. [Vosges, Sierra Nevada, Satpura Ranges]
  - (iii) Volcanic Mountains—accumulation of lava and volcanic material around crater; cone-like; can have steep or gentle slopes. [Fujiyama, Etna, Kilimanjaro, Cotopaxi, Rainier]
  - (iv) Residual Mountains—erosion of surrounding land by wind, water, glaciers. [Nilgiri, Catskill, Scottish Highlands]
- ▶ Importance—Influence on rains, winds, vegetation, rivers, waterfalls, resorts, minerals.

## Plateaus

- ▶ Broad, levelled stretch of land rising abruptly from surrounding land, usually horizontal layers of rock, often cut into deep valleys by streams; usually 90-900 metres. Types, depending on location:
  - (i) Continental—very large, surrounded by water/plains. [Deccan, Australian, Southern Africa]
  - (ii) Intermontane - largest, most complex, surrounded by mountain ranges. [Tibetan, Bolivian, Columbian, Mexican, Anatolian]
  - (iii) Piedmont—at foot of a mountain range, not very high. [Potwar, Appalachian, Patagonian]
  - (iv) Lava—volcanic activity, usually fissure flows; vast, thickness depends on volcanic material. [Malwa, Columbia]
- ▶ Importance—influence on minerals, farming, waterfalls, tourism.

## Plains

- ▶ Low, flat areas; some levelled, some undulating; less than 200 metres high. Types, depending on mode of formation:
  - (i) Depositional—filling lakes and depressions with sediment brought by wind, water and glaciers; alluvial plains—by rivers [Gangetic Plain]; drift plains—by glaciers [Canada]; loess plains—by wind [NW. China].
  - (ii) Structural—emergence of landmass from sea; coastal plains [southeastern plains in the US].
  - (iii) Erosional—denudation of mountains and plateaus by water, wind and glaciers; never smooth [Canadian Shield; Siberian Plains].

- ▶ Importance—human settlement, economic activities like agriculture, irrigation, means of transport, industries, etc.

## Assessment Corner

### Oral Assignment

- A. Ask for answers at random from the students. Confirm the right answers.  
Let the students write down the answers if they like.

### Written Assignment

- B–F. The teacher has two options—(i) Either do these exercises orally first and then ask the students to write them down. OR (ii) Ask students to write the answers on their own. Then the teacher can announce the correct answers and students can ask their partners to cross check them.

In either case, the answers can be written as homework and the teacher can check them in the class.

### Think Tank

- G. **HOTS questions:** Discuss the five questions in class and let students write the answers to F and G as homework. Teacher should assess individual work.