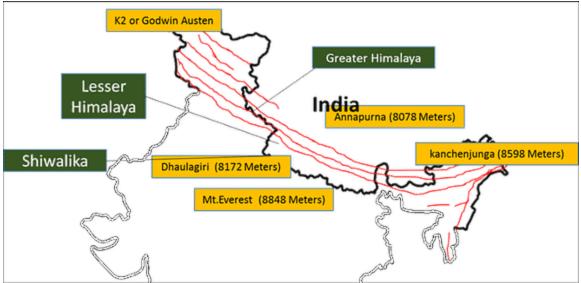
The Northern Mountains:

The Himalayan Mountains form the northern mountain region of India. They are the highest mountain ranges in the world. Some prominent features are highest peaks, deep valleys & gorges, glaciers etc.



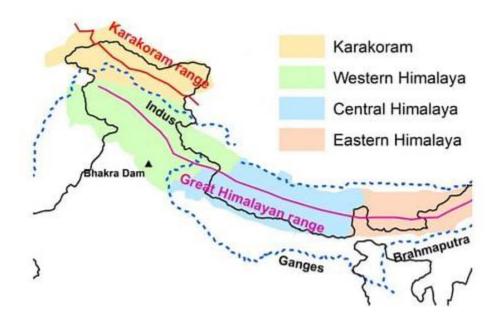
Mountains cover one-fifth of Earth's total Land Area.

- The Himalayas have three mountain ranges that run parallel to each other. These are:
- 1. Himadri or Greater Himalaya
- 2. Himachal Himalaya or Lesser Himalaya
- 3. Siwalik or Outer Himalayas



The Three Mountain Ranges

- The high mountain peaks lie in the Himadri ranges. Mount Everest in Nepal is the world's highest mountain peak.
- The highest mountain peak within Indian territory is Kanchenjunga. The other important mountain peaks in India are Dhaulagiri and Nanda Devi.
- The world's second-highest peak K2 is situated in Jammu and Kashmir.
- It is part of the Karakoram Range.



The Northern Mountains

- The high peaks remain covered with snow all over the year. There is no vegetation or animal habitation over there. But high peaks have always challenged mountaineers.
- •On May 29, 1953, two mountaineers Tenzing Norgay of India and Edmund Hillary of New Zealand climbed the highest mountain top-Everest.



Tenzing Norgay and Edmund Hillary

• The Indian tricolor was proudly hoisted on the world's highest point.

Hazards of Mountaineering

- Mountaineers need protection from severe cold and frost. But there is limit to how much baggage can be taken up.
- So the clothing has to be quilted and light. The air up on the mountains is rare. Breathing becomes difficult due to lack of oxygen.



Special clothing of Mountaineers

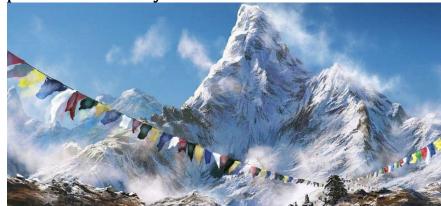
- Mountaineers carry oxygen cylinders with them for use beyond a certain height.
- The glare of the sun's reflection from ice can seriously damage the eyes. As such, mountaineers have to wear special glasses.
- Indian women did not lag behind in the conquest of Everest. Bachendri Pal (1984) was the first Indian woman to have climbed Everest. Many more teams have succeeded in climbing Everest.



Mountaineer Bachendari Pal

- Besides posing a challenge to mountaineers, the high peaks are useful in many more ways. Huge blocks of ice from these mountain tops flow down as rivers of ice. They are known as Glaciers.
- As these Glaciers move into warmer regions, the snow melts. Rivers like the Ganga and the Yamuna originate from the glaciers Gangotri and Yamunotri. During the summer months, these rivers do not get dry.
- The melting snow feeds them with water. Melting snow also keeps other rivers like the Satluj and the Brahmaputra full of water during the summer months.

Beauty & Importance of Himalayas



- The Himachal ranges have beautiful hill resorts. Srinagar (J and K), Nainital and Mussoorie (Uttarakhand), Dalhousie and Dharamshala (Himachal Pradesh), and Darjeeling (West Bengal) are visited by thousands of tourists during the summer months.
- Patches of plain lands between the hills are called Valleys. The valleys are suited for the cultivation of crops like apples, pears, plums, and potatoes. The natural forests on Himachal ranges provide valuable wood and other forest produce. Pine and Deodar are the popular varieties of wood obtained from the forests.



Pine Cone: Pine and Deodar are popular varieties in Himalayas.

- The Siwalik is the southernmost range of the Himalayas. The other ranges have been formed much earlier.
- The average height of the Siwalik ranges is about 600 meters only. There are some broad valleys in between the Himachal and the Siwalik ranges which are known by the name "duns". Dehradun is one of them.
- The Siwalik ranges are home for a wide variety of wildlife. Very limited farming is done by people living in these areas. The farming is done on steps which is known as terrace farming.



Terrace Farming

- The Himalayas have been a boon to us in many ways. They protect us from the very cold winds that blow in the north.
- But for the Himalayas, northern parts of India would have been a barren cold dry desert. The rivers originating from the Glaciers bring along with them soft rocks. As the bits roll down, they are transformed into fertile soil.
- Every year, as the rivers flood, the fertile soil is laid upon the river banks.
- The Himalayas were at one time our sentries in the north. But that is no longer true. There are gaps called Passes within the high mountain ranges.
- In 327 B.C. Alexander came all the way from Greece and entered India through the Khyber Pass. This pass joins Afghanistan to what is now Pakistan. In 1962, the Chinese forces attacked India using the **Nathula** (means pass) joining Sikkim to Tibet.

Keep in Mind!

- The Himalayas are the world's mightiest mountain ranges.
- The Himalayas stretch between J and K, Himachal Pradesh, West Bengal, Sikkim, Bhutan and Arunachal Pradesh. Along the way, Himalayas run through Nepal.
- Mount Everest is the world's highest mountain peak (8,848 m)
- •Kanchenjunga (8,585 m) in Sikkim (India) is the second highest peak.
- Tenzing Norgay was the first Indian to have climbed Everest. Bachendri Pal was the first Indian woman to have climbed Everest. Santosh Yadav climbed Everest twice which is a world record.

- •Himadri, Himachal and Siwalik are three mountain ranges of the Himalayas.
- •The Himalayas protect us from cold winds blowing in the north. The Glaciers keep the rivers flowing during summers. The beautiful valleys, fertile plains, varieties of wildlife and rich forest produce are all gifts from the Himalayas.
- •There is need for saving the Himalayan forests and wildlife.