



CHAPTER 2: PHYSICAL FEATURES OF INDIA

Read the E lesson and the unit: Physical Features of India from the textbook (Students may refer to the link given below). Thereafter, follow the instructions and do the given assignment in the notebook. Please mention date, index and topic.

Text book link: <http://ncert.nic.in/textbook/textbook.htm>

POINTS OF RECAPITULATION

- Theory of Continental Drift – by Alfred Wegener – Formation of Pangea and Panthalasa; further into Laurasia, Gondwanaland and Tethys Sea.
- Theory was criticised a lot by the scientists –this further gave way to the Theory of Plate Tectonics.
- Lithospheric crust is divided into 7 major plates which keeps on moving continuously due to the convection currents of the mantle (movement of magma).
- Plates move continuously and three types of movements occur – Divergent, Convergent and Transform Movement.
- Convergent Movement of Indo-Australian Plates and Eurasian Plates leads to the Formation of Himalayas.

IMPORTANT WORDS TO KNOW BEFORE

Mountain - Large landform that stretches above the surrounding land.

Mountain Peak – The top of a mountain is known as its peak.

Mountain Range – A chain or series of mountains in a line is known as a range of mountains.

Trans-Himalayan Ranges – The mountain ranges found beyond the Himalayas. It mainly includes – Karakoram, Ladakh, Zaskar Range. The highest mountain peak of India K2 lies in the Karakoram range.

THE HIMALAYAN MOUNTAINS



The Himalayas (**Him – snow; alayas – dwelling**) is a set of three ranges of mountains that forms the natural boundary between India and China. The Himalayan mountain range includes the **highest mountain peaks of the world** like Mount Everest, Kanchanjunga, Nanda Devi, Namcha Barwa, Annapurna etc.

The range of the mountains runs from west to east direction that is from, Jammu and Kashmir to Arunachal Pradesh covering a **distance of about 2400km**. The shape of the range is said to be **arc shaped**. The mountains have the most rugged topography of the world. It has got the loftiest peak to deepest vallies of the world.

The width of the Himalayan ranges varies from 400km in Kashmir to 150km in Arunachal Pradesh. The Himalayas consist of the **three parallel ranges**.



The image shows the stretch and shape of Himalayas

Himalayas are often referred to as **'YOUNG FOLD MOUNTAINS':**

1. The Himalayas are one of the recent landforms formed some 7 millions of years ago. In a geological timescale, this time frame is counted as very recent.
2. The peaks of the mountains are conical and the vallies are very deep. Both the features again suggest that the activities of erosion and deposition are happening at a very slow pace here and therefore, the feature is still young.
3. Many geologists believe that the height of the Himalayas is still increasing, that's again a mark of being young. For example: the height of Mt Everest was 8848 meters which has increased to 8852 meters. The increase is mainly due to the continuous convergent plate movement.
4. Himalayas are also known as Fold Mountains as these mountain ranges are formed due to the convergence of Indo-Australian Plate and Eurasian Plate. The continuous

convergence and folding of sediments of Tethys Sea has led to the formation of mighty Himalayas.

LONGITUDINAL DIVISION OF HIMALAYAS

The common set of division of Himalayas is done on the basis of height. Himalayas are a set of three ranges of mountains which are divided into Himadri, Himachal and Shiwalik. The three ranges are almost parallel to each-other.

S.NO	RANGE	NOMENCLATURE	CHARACTERISTICS	AVERAGE HEIGHT	IMPORTANT PEAKS/RANGE
1.	Himadri	Inner Himalayas/Great Himalayas	-Northernmost range -most continuous range with high peaks -covered with snow throughout the year -number of glaciers descend from here -core of this part of Himalayas is composed of granite	About 6000 meters	-Mt Everest in Nepal -Kanchanjunga -Nanda Devi -Namcha Barwa -Annapurna
2.	Himachal	Lesser Himalayas/Middle Himalayas	-lie to the south of Himadri range -one of the most rugged mountain system -composed of highly compressed rocks -Average width is of 50km. -the range is well known for its hill stations.	Between 3700 to 4500 meters	-important ranges include – Pir Panjal, Dhaula Dhar, Mahabharata range. - famous valley of Kashmir, Kangra, Kullu are found in this range.
3.	Shiwaliks	Outer Himalayas	-it is the southernmost and lowermost range. -width varies from 10 to 50 km. -composed of unconsolidated sediments brought	Between 900 and 1100 meters	Longitudinal vallies between Himachal and Shiwaliks are found known as Duns. Eg. Dehra Dun,

S.NO.	REGIONAL DIVISION	RIVERS	REGIONS COVERED
1.	Kashmir Himalayas	Between Indus and Satluj	Covers mainly the mountains of Kashmir and Himachal Pradesh
2.	Kumaon Himalayas	Between Satluj and Kali	Covers mainly the mountains of Uttarakhand
3.	Nepal Himalayas	Between Kali and Teesta	Covers largely the mountains of Nepal
4.	Assam Himalayas	Between Teesta and Dihang	Covers mainly Bhutan and Arunachal Pradesh

PURVANCHALS

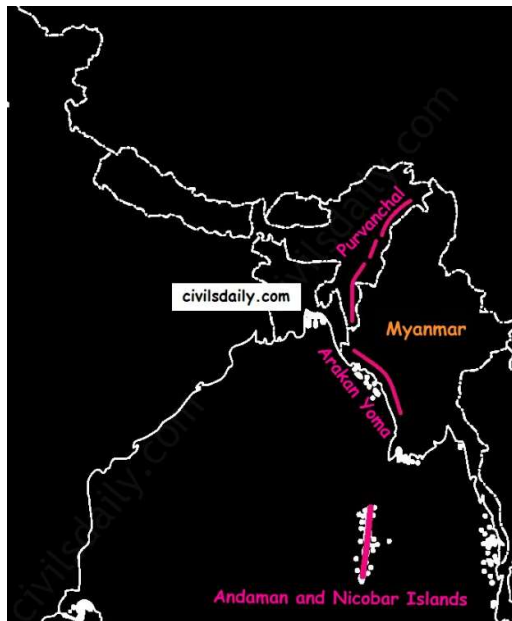


image showing the Purvanchal range between India and Myanmar

These mountain ranges mark the eastern boundary of India – between India and Myanmar.

Purvanchal (Purva – east; anchal –mountains)

Beyond Dihang, the Himalayas take a southward bend.

This hill range is mainly composed of sandstones (sedimentary rocks) and run along the North-eastern states of India mainly, Nagaland, Manipur and Mizoram.

They are covered with thick and dense forests.

The range is further divided into Patkai hills, Naga Hills, Mizo Hills and Manipur Hills.

The link given below shows the detailed study of the Himalayan Mountain range and the Trans-Himalayan Range

<https://www.youtube.com/watch?v=0v6-fB-gftQ>

ASSIGNMENT (to be done in continuation of the previous assignment)

Q.1. Justify that Himalayas are 'Young Fold Mountains'. (3 points)

Q.2. Evaluate the characteristics of Himadri range.

Q.3. List the regional division of Himalayas from west to east direction along with the river vallies.

Q.4. On a political map of India, locate the following:

- a. Shiwalik range
- b. Purvanchals
- c. Mt Everest
- d. Kanchanjunga
- e. K2