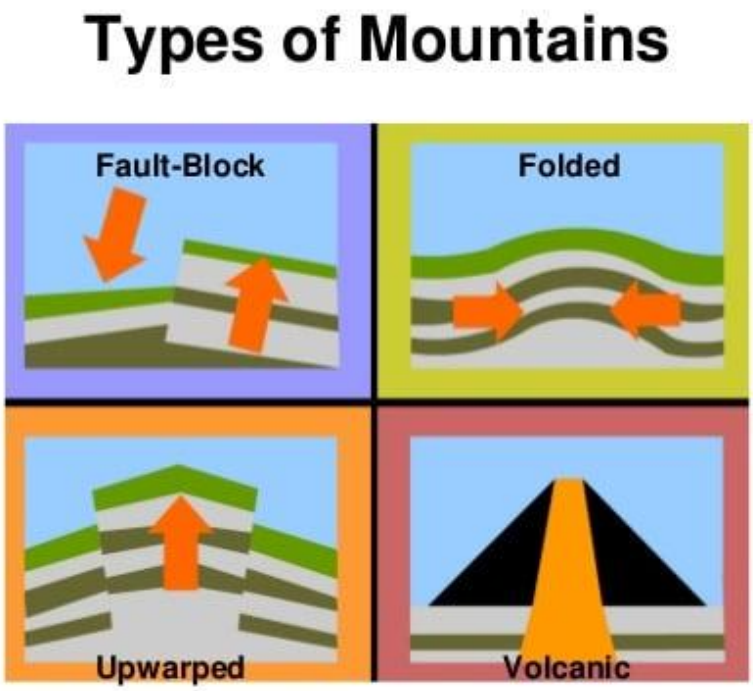
Mountains and Type of Mountain

Mountain vs. Plateau

Mountain elevates from earth's crust. Plateau is tablelands of plane land. The mountain peaks are pointy. The peak of the plateau is flat. Mountain forms by the movement of plates of the lithosphere of the earth, while Plateau forms by volcanic eruption or degradation by steady water flow or glaciers. The weather like storms, winds, icebergs, and water erodes mountain less, while these unfavorable conditions erode plateau greatly. Mountain rocks are a source of mineral deposits, but the plateau is rich sources of minerals.

Mountain is higher, while plateau has low heights. Some mountains cross the clouds, while the height of the plateau is about thousands of meters. Mountains classify according to the formation, whereas plateau has classes depending upon the area. Mountains have three major categories; conversely, the plateau has four. Forests cover the mountains, which provide timber, wood, drugs, and grazing areas for animals. The plateau does not provide these benefits.



Fold Mountains

- They form when two plates with landmasses on them move towards each other.
- The plates push layers of accumulated sediment in the sea into folds between them.
- This becomes a fold mountain range.
- Most fold mountains continue to grow as the plates constantly move.
- Examples: the Himalayas (Asia), Rockies (USA), Andes (South America), Alps (Europe)

Young Fold Mountains

In India, the Himalayas represent the young fold mountains because they have formed only a few million years ago by a collision of the Eurasian plates as well as the Indo-Australian plates as a result of the Continental drift. Young fold mountains are 10 to 25 million years of age. The young fold mountains are formed because of the folding of the earth's crust due to tectonic activity or the colliding of tectonic plates with one another. They are also higher than that of the old fold mountains and have steeper slopes and deeper valleys.
The features of young fold mountains are as follows:
The Himalayas are the northernmost and a continuous range and it also consists of lofty peaks like the Nanda Devi and Kanchenjunga.
The Himalayas always remain snowbound consisting of frozen rivers of ice called glaciers and the mountain regions of the Himalayas have the shape of an arc.
The Himalayan region is symmetrical in nature and is richly composed of sedimentary rocks and granites.
The average height of the Himalayan mountain peaks stretches up to 6000 meters and above.

Block Mountains

- These mountains are formed when great blocks of the earth's crust may be raised or lowered during the late stages of mountain-building
- During the uplift of structural mountains, sometimes magma flows upward into the crust.
- On its cooling and hardening beneath the surface, it contracts and the overlying rock may crack into large blocks moving up or down.

- An intense folding of rocks is generally followed by faulting of strata due to the horizontal force of tension.
- The land between the two parallel faults either rises forming block mountains or horsts or subsides into a depression termed as a *rift valley* or
- An old fold mountain may also be left as block mountains due to continuous denudation. These mountains have flat tops, steep fault scarps and the subsided portions between parallel fault are flat-bottomed.
- The Vosges in France, Black Forest mountains in Germany and the Salt Range in Pakistan are cited as typical examples of block mountains. Sierra Nevada of California (USA); Wasatch range in the Utah province are also examples of Block mountains.
- River Rhine in Europe flows through a rift valley.
- The Great Rift Valley of the world runs for about 6,000 kilometres from East Africa to Syria through the Red Sea.

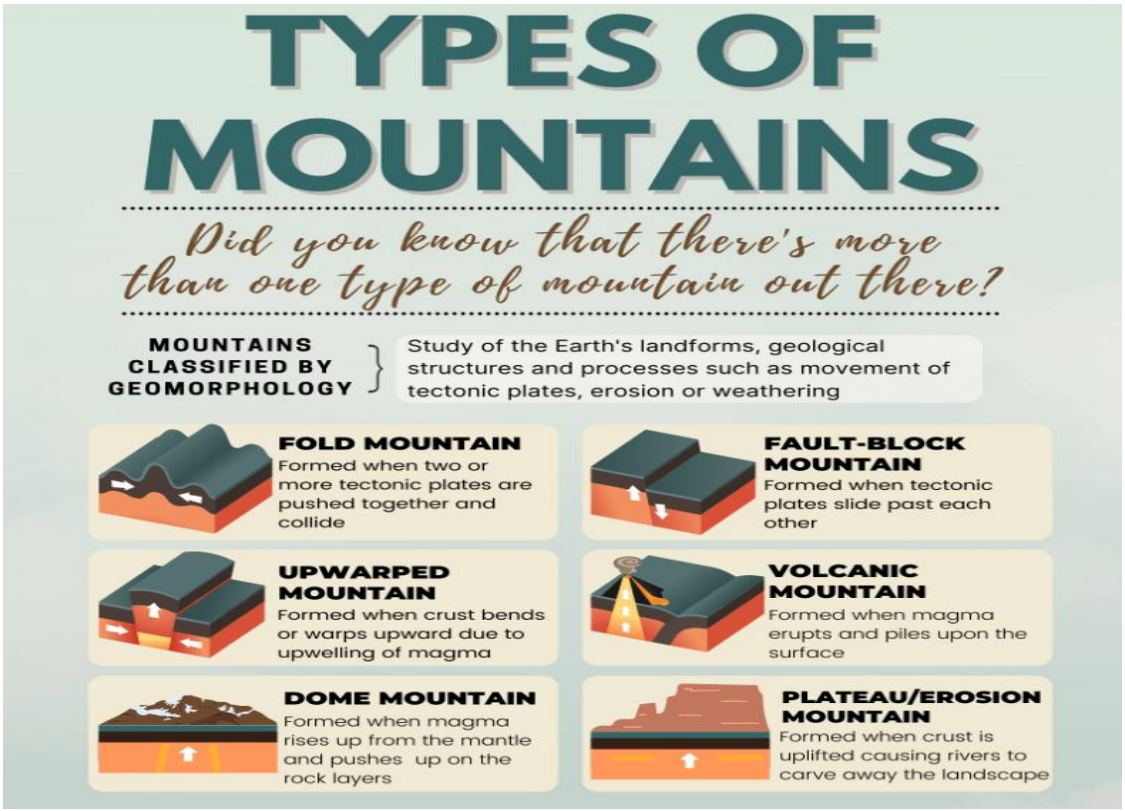
Volcanic Mountain, Plateau and Plains of India

Volcanic Mountains

Volcanic mountains are formed by the **deposition of lava and pyroclastic materials around a volcanic vent**. That is why these mountains are also known as 'mountains of accumulation'. Lava and pyroclastic materials ejected from an active volcano accumulate in the form of a cone. It may be noted that volcanic mountains are also formed on the sea floor. When such submarine volcanic mountains rise above the sea surface, they appear as islands.

Relict Mountains

- We have seen the effects of weathering (as part of exogenic processes). Weathering acts upon the earth's crust constantly.
- To a large extent, the process of wearing down depends on the shape and structure of the rocks upon which it acts.
- So, in some cases, some portions of an elevated area escape from the process of weathering due to the hardness of the materials it is made of.
- These portions remain unweathered while its surrounding area gets eroded constantly. This results in the formation of **Residual or Relict Mountains**.
- **Examples:** Hills like Nilgiri, Palkonda, Parasnath and Rajmahal and Mountains like the Aravalli, the Vindhya, and the Satpura are some of the examples of Relict Mountains in India.



Plateau

A plateau is a flat-topped table land.
Plateaus occur in every continent and take up a third of the Earths land.
They are one of the four major landforms, along with mountains, plains, and hills.
Plateaus, like mountains may be young or old. The Deccan plateau in India is one of the oldest plateaus.
Valleys form when river water cuts through the plateau. The Columbia Plateau, between the Cascade and Rocky mountains in the northwestern United States, is cut through by the Columbia River.
Sometimes, a plateau is so eroded that it is broken up into smaller raised sections called
Many outlier plateaus are composed of very old, dense rock formations. Iron ore and coal often are found in plateau outliers.
Plateaus are very useful because they are rich in mineral deposits. As a result, many of the mining areas in the world are located in the plateau areas.

North Indian Plain

- The Northern Plains have been formed from the alluvium that the mountain rivers deposited here.
- This turned the soil on the surfaced land fertile for growing a rich harvest of variety of crops.
- This led to the development of the Indus River Valley Civilisation. The rich soil was further aided by favourable climate and constant water supply from the rivers.
- Between the mouths of the Indus and the Ganga-Brahmaputra, the North Indian Plain covers a distance of 2400 km. It is 240-320 km wide at some places.
- The North Indian Plains have the Indus river system in the west and the Ganga-Brahmaputra river system in the east. The first includes Jhelum, Chenab, Ravi, Beas, Satluj.
- The Indus flows into the Arabian Sea. The second includes Ganga, its tributaries and the Brahmaputra which combine as Meghna as they drain into the Bay of Bengal.
- They form the world's largest and fastest growing delta. The difference in relief has led the North Indian Plains to be divided into four zones : (i) Bhabhar, (ii) Tarai, (iii) Bangar and (iv) Khadar.