



Mountain Climate

Mountain Regions

Mountains are areas of land that are higher than 610m (2000ft). They are found all around the world, from the Rockies in North America and the Andes in South America, to the Himalayas in Asia and the Alps in Europe. There are also many other smaller ranges or individual mountains which have their own climates.



Temperature and Altitude

As the altitude, or height of the mountain, increases, the air becomes thinner and it cannot absorb or retain heat very well. As altitude increases, air pressure decreases and also cools the rising air.



Rainfall in Mountain Climates

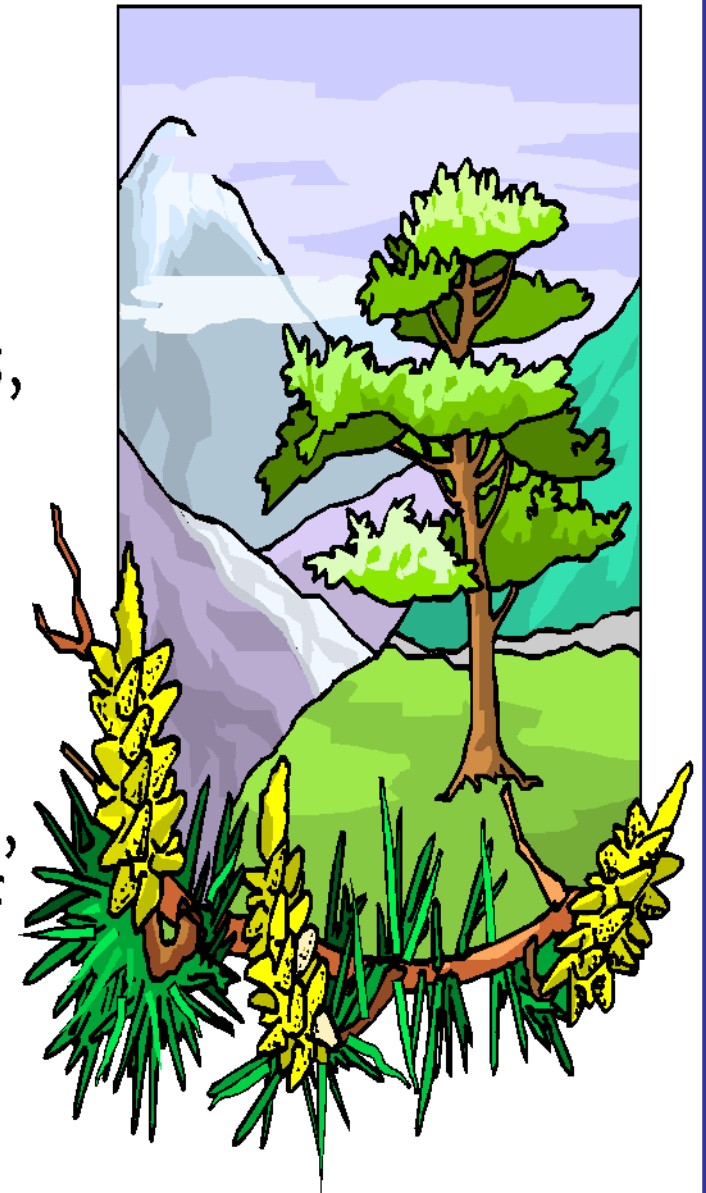
Because the temperature at the mountain's peak is lower than at sea level, mountainous areas receive more rainfall than lower, surrounding areas.

Winds carry water from the ocean, and the moist air rises when the mountain blocks its path. The air cools as it rises, allowing it to carry less moisture. The moisture leaves the clouds in the form of rain.



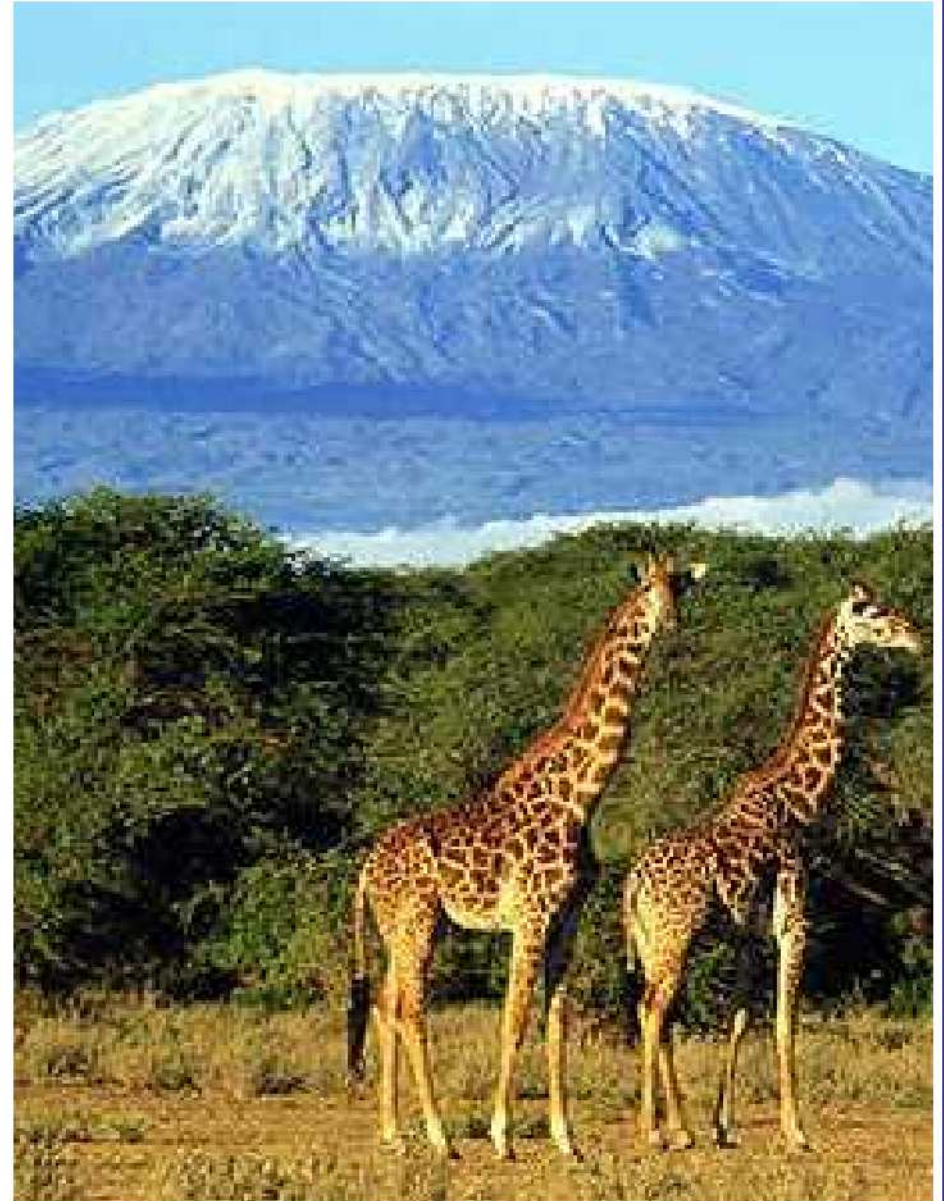
Vegetation

Mountain plants have adapted to cope with extreme contrasts in living conditions. High winds, extreme cold, changing temperatures, thin rocky soils, snow and ice, and a thin atmosphere that contains very little oxygen all affect the plants living there. Each mountain has bands of horizontal layers of totally different kinds of trees, shrubs and other plants. Each band of vegetation is adapted to survive in one particular area of the mountain.



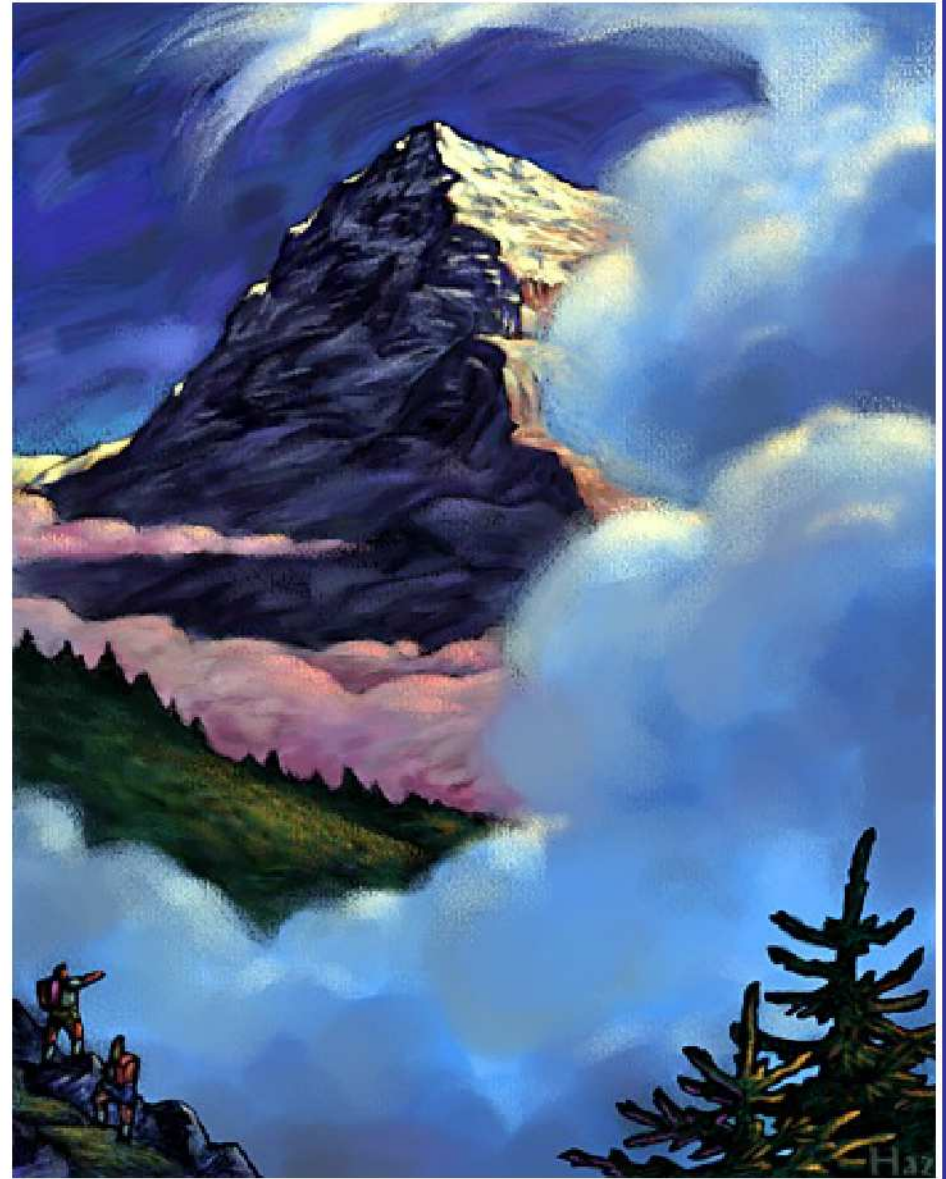
Snow at High Altitudes

Many mountains have permanent snow on the higher areas. This can even happen in places near the equator such as Mt Kilimanjaro which has a sub-tropical climate at its base but permanent snow on its peak. However, during the last 2-3 years the snow cover at the summit has been significantly reduced, possibly caused by the process of global warming.



Changeable Weather

Weather can change very rapidly on mountains: if the sun is suddenly obscured by clouds the temperature can drop several degrees in a matter of moments. Fog and low cloud can descend quickly bringing rain and low temperatures with them. Winds are also often a problem on mountains and can reach gale force very rapidly.



Tourism

Mountain regions are becoming more popular as tourist destinations. As well as skiing and winter sports, people also visit mountains to view the scenery, climb challenging slopes or explore local villages with different cultures and traditions.



Hazardous Conditions

Sudden changes in weather can make mountains extremely hazardous for people who are unprepared to cope with such rapid changes. When venturing out in mountainous areas it is important to take clothing and equipment which will protect you in an environment which is sometimes said to have all four seasons in one day.



Living on a Mountain

Living in mountainous regions is much harder than living in lowlands. The weather is harsh and most of the land isn't suitable for growing crops and raising animals. About half of mountain dwellers live in the Andes, Central Asia, and Africa. The air is also thinner at higher elevations, making breathing more difficult.

