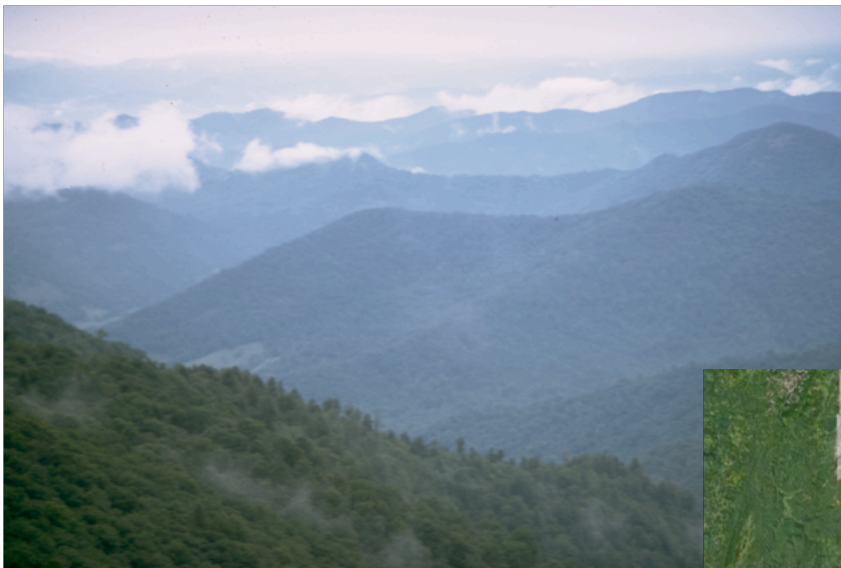


Not All Mountains are the Same

A mountain may seem like any other mountain, but not all mountains are the same. Check out these brief descriptions and pictures of the different types of mountains. Have you seen any of these mountain types?

Fold Mountains (Folded Mountains)

- Folded mountains form when two plates push together.
- Folding is a slow movement, so the Earth's crust bends instead of breaking.
- Folding may take millions of years.
- Folded mountains are the most common type of mountain.
- The world's largest mountain ranges are folded mountains.



Above: Courtesy of the National Park Service

The Blue Ridge Mountains are part of the Appalachian Mountain Range, a series of folded mountains that extend from Canada to central Alabama.

Right: Courtesy of the Google™ Earth

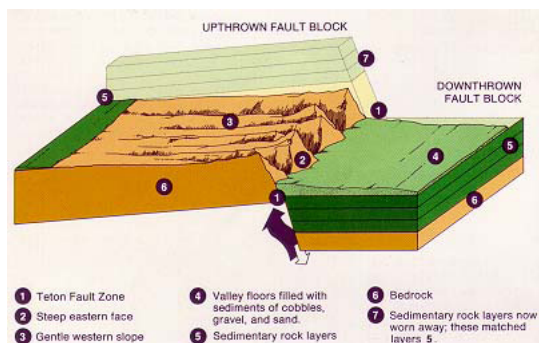
Folds in the Appalachian Mountains can be seen in this aerial photo. The folds run from the lower left corner to the upper right.



Image © 2009 Commonwealth of Virginia
Image PA Department of Conservation and Natural Resources: PAMAP.USGS
Image USA from Source: ArcGIS

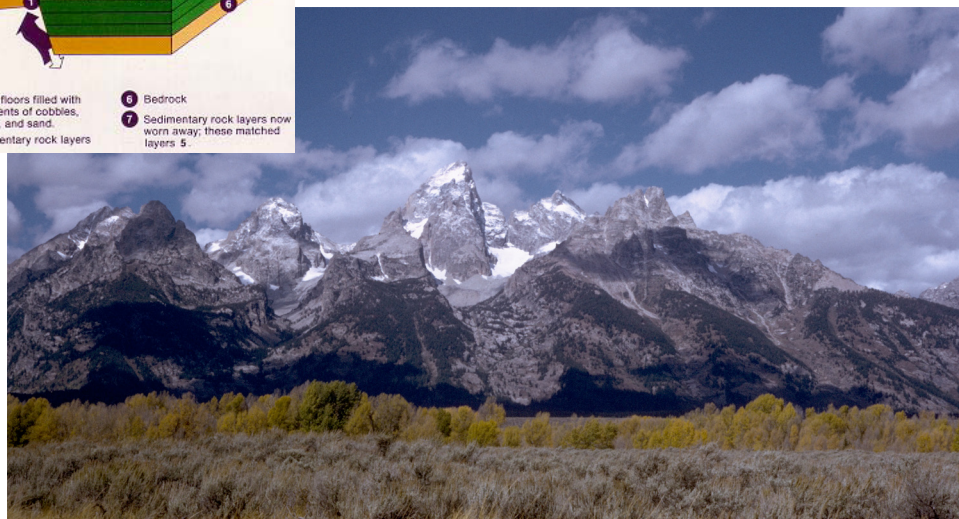
Fault-block Mountains (Block Mountains)

- Block mountains form when faults or cracks in the Earth's crust pull apart, allowing some blocks of rock to move down and others to move up.
- The movement happens more quickly than in folded mountains, so the Earth's crust breaks up into blocks or chunks rather than folds.
- A fault-block mountain often has a steep frontside and a gently sloping backside.



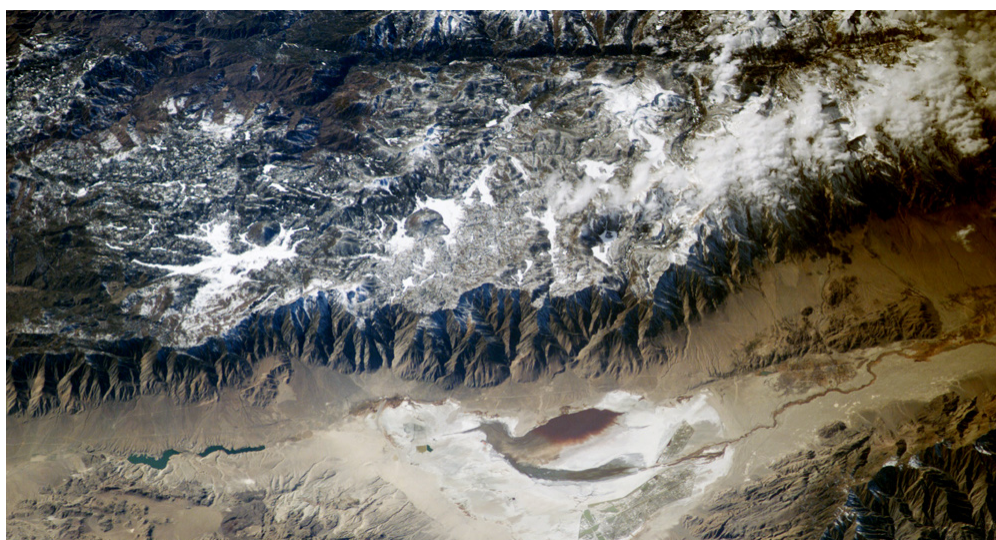
Courtesy of the National Park Service

Stretching of the crust caused the Teton Fault zone and the formation of the Teton Mountains.



Courtesy of the National Park Service

Stretching of the crust caused the Teton Fault zone and the formation of the Teton

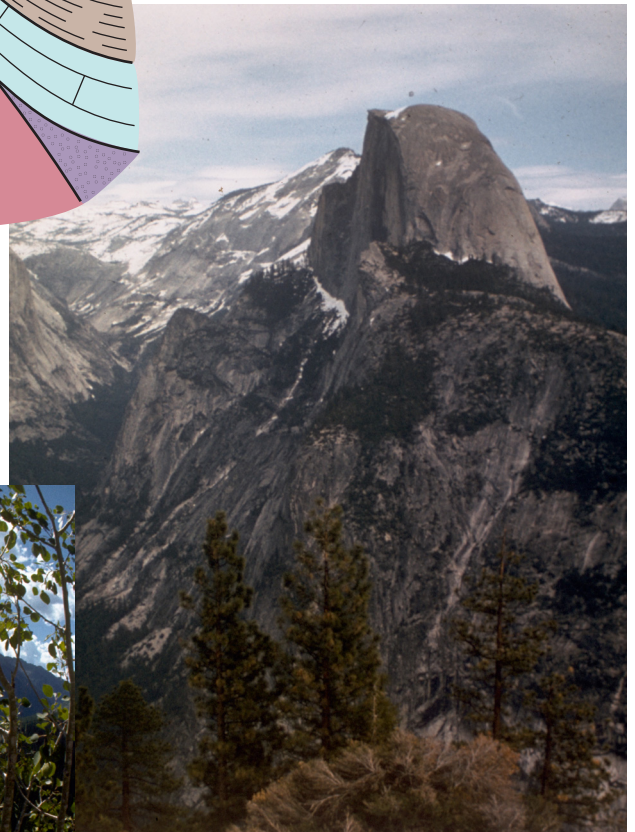
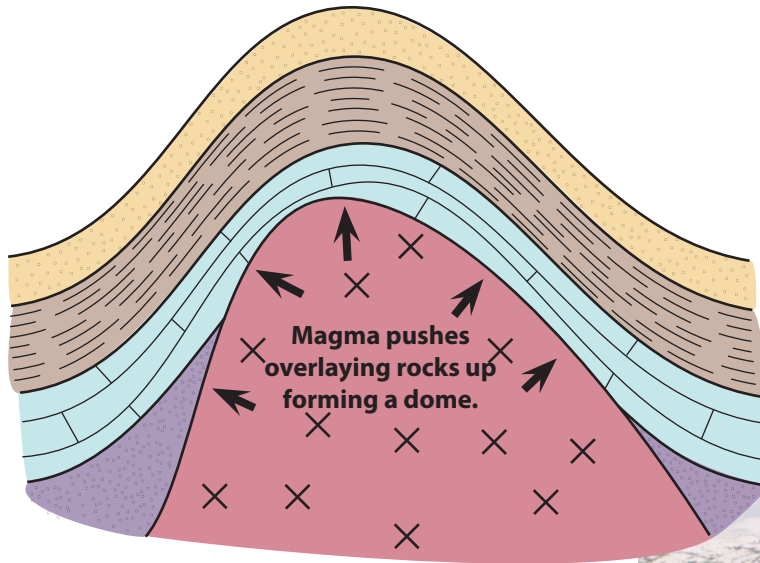


Courtesy of the NASA

This image of the Sierra Nevada Mountains shows the steep front side and the gently-sloping backside of these fault-block mountains.

Dome Mountains

- Dome mountains form when magma deep within the crust pushes up overlying rock layers.
- The magma pushes up without breaking through the rock layers to erupt like a volcano. The magma cools underground to become igneous rock such as granite.
- The uplifted area is called a dome because it looks like the top half of a sphere (ball).
- Over time the rock layers above the dome erode exposing the granite.



Courtesy of the National Parks Service

Half Dome in Yosemite National Park is a dome mountain. The overlying layers have eroded away to expose the granite core.

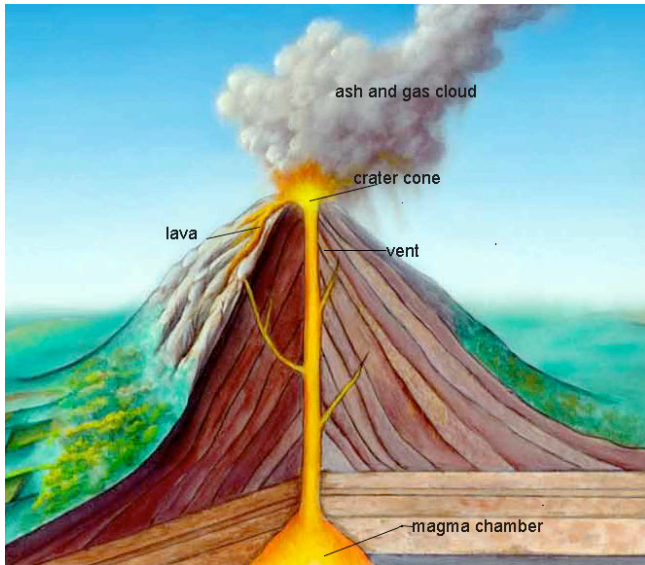


Courtesy of the National Parks Service

Areas of the Rocky Mountains are dome mountains like this area of Rocky Mountain National Park.

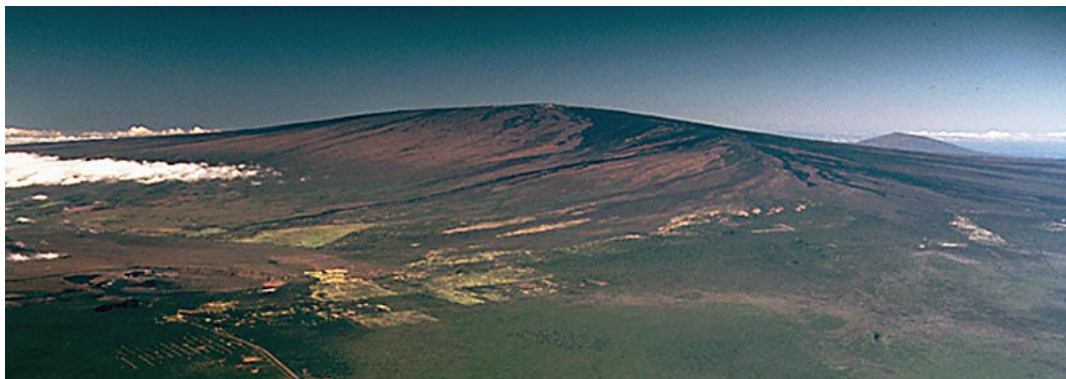
Volcanic Mountains

- Volcanic mountains form when molten rock erupts as lava and piles up on the surface to form a volcano.
- Volcanoes can either form on land or on the ocean floor.
- The shape of volcanic mountains depends on the type of lava that erupts. There are three types of volcanic mountains: cinder cone, shield, and composite.



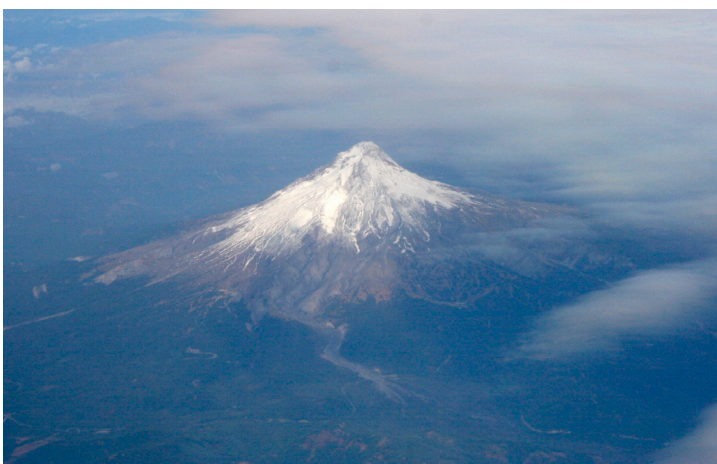
Courtesy of the National Parks Service

Cinder cone volcanoes are small like Capulin Volcano in New Mexico.



Courtesy of the National Parks Service

Mauna Loa on the island of Hawaii is a shield volcano. It is taller than Mount Everest if you measure it from its base at the bottom of the Pacific Ocean.

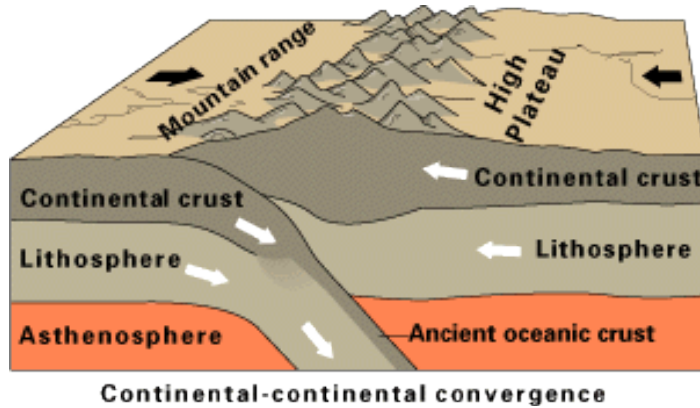


Courtesy of Sue Jagoda

Mount Hood in Oregon is a composite volcano in the Cascade Range.

Plateau Mountain

- Plateau mountains form in a similar manner as folded mountains. They are large areas of flat-topped rocks that have been lifted high above the surrounding area.
- Plateau mountains form as surrounding areas are eroded during the slow uplift of the plateau.
- Most plateaus are found near folded mountains.

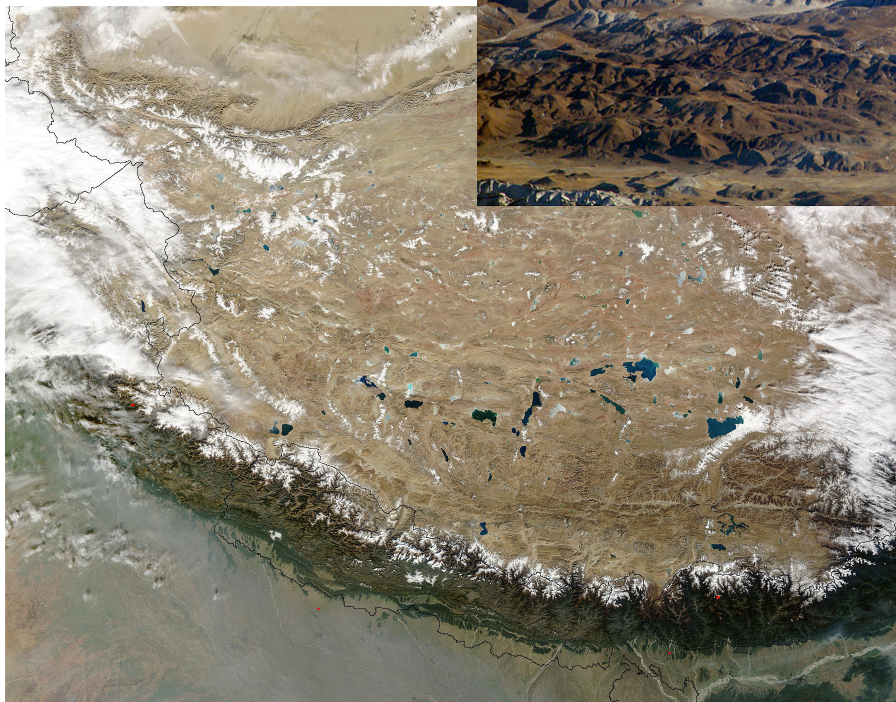
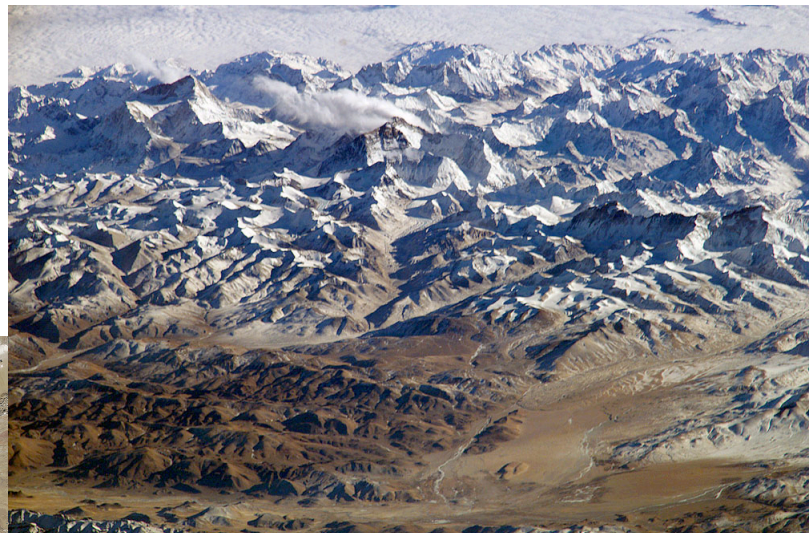


Courtesy USGS

Diagram of rising Tibetan Plateau.

Courtesy of NASA

The rugged mountains of the Tibetan Plateau have been exposed by erosion as the plateau was uplifted.



Courtesy of NASA

Satellite view of the Tibetan Plateau.