

Folding and Faulting: The Business of Mountain-Making

The following information is taken from the HubPages website at <http://hubpages.com/hub/Types-and-Formation-of-Mountains-For-kids>

It would be a GREAT idea for you to visit the site in your spare time (you know, instead of the formal homework that I almost never give you.). It will give you access to more pictures and diagrams and will deepen your understanding of the topic.

Types of Mountains

Mountains can be classified into five different basic types based on the cause that formed the mountain, type of rocks, shape and placement on land.

1. Fold Mountains (Folded Mountains)
2. Fault-block Mountains (BlockMountains)
3. Dome Mountains
4. Volcanic Mountains
5. Plateau Mountains

Fold Mountains:

- Most common types of mountains
- Formed when two continental tectonic plates collide and their edges crumble to form mountains; the crust is uplifted forming folds on top of the other.
- Typically vast mountain ranges stretching across thousands of kilometres
- Examples: The Rocky Mountains in North America, the Alps in Europe, the Andes in South America, the Urals in Russia and the Himalayan Mountains in Asia



Lewis Thrust Fold—Part of Rockies, Canada

Fault-Block Mountains (or Block Mountains):

- Created when faults or cracks in the Earth's crust force materials or blocks of rocks upward or down
- Fault-block Mountains usually have a steep front side and then a sloping back side.
- Examples: The Sierra Nevada Mountains in North America and the Harz Mountains in Germany



Sierra Nevada Mountains, USA

Dome Mountains (or Upwarped Mountains):

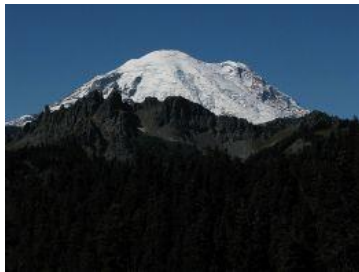
- Formed when large amounts of molten rock or magma push the earth's crust from underneath. The magma in this case never reaches the top surface of the earth. So even before it can erupt the source of magma goes away leaving the pushed up rock as such. This rock then cools and forms a mountain.
- With time the mountain forms a dome shape, where it gets warped due to erosion.
- Examples: The Black hills of South Dakota in the USA and the Adirondack Mountains in New York



Dome Mountains

Volcanic Mountains:

- Created by volcanoes when magma pushes its way to the crust, reaches the surface, and erupts as lava, ash, rocks and volcanic gases; these materials then build up around the vent through which they erupted and eventually harden; shaped by further eruptions, lava flows, and collapses.
- Examples: Mount Fuji in Japan, Mount Rainer in the US, including Mauna Loa & Mauna Kea on Big Island, Hawaii



Mount Rainer, USA

Plateau Mountains:

- Formed by Erosion
- High levels of flat land, over 600 meters above sea level formed due to earth's internal activity
- Over billions of years, the rivers can cut deep into a plateau and make tall mountains.
- Found near Fold Mountains
- Examples: The mountains in New Zealand and the Catskills of New York



Argentina, Patagonia, grassy plateau, mountains in background