Fold Mountains

Fold mountains are the most common type of mountain. The world’s largest mountain ranges are fold mountains. These ranges were formed over millions of years.

Fold mountains are formed when two plates collide head on, and their edges crumbled, much the same way as a piece of paper folds when pushed together.

The upward folds are known as anticlines, and the downward folds are synclines.

Examples of fold mountains include:

- Himalayan Mountains in Asia
- the Alps in Europe
- the Andes in South America
- the Rockies in North America
- the Urals in Russia
Fault-block Mountains

These mountains form when faults or cracks in the earth's crust force some materials or blocks of rock up and others down.

Instead of the earth folding over, the earth's crust fractures (pulls apart). It breaks up into blocks or chunks. Sometimes these blocks of rock move up and down, as they move apart and blocks of rock end up being stacked on one another.

Often fault-block mountains have a steep front side and a sloping back side.

Examples of fault-block mountains include:

- the Sierra Nevada mountains in North America
- the Harz Mountains in Germany
Dome Mountains

Dome mountains are the result of a great amount of melted rock (magma) pushing its way up under the earth crust. Without actually erupting onto the surface, the magma pushes up overlaying rock layers. At some point, the magma cools and forms hardened rock. The uplifted area created by rising magma is called a dome because of looking like the top half of a sphere (ball). The rock layers over the hardened magma are warped upward to form the dome. But the rock layers of the surrounding area remain flat.

As the dome is higher than its surroundings, erosion by wind and rain occurs from the top. This results in a circular mountain range. Domes that have been worn away in places form many separate peaks called Dome Mountains.