

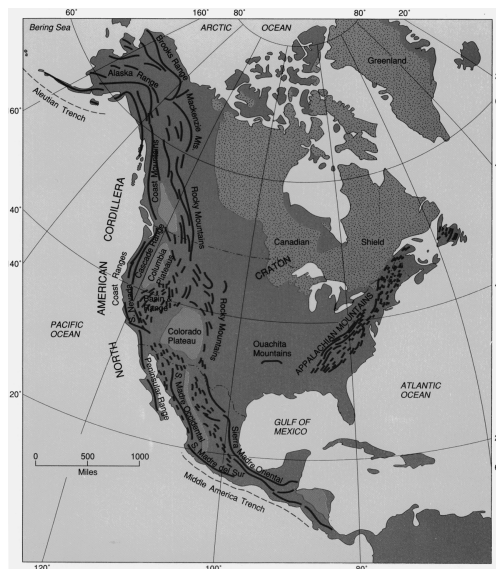
Mountain Building Processes

A **mountain** is a large terrain feature that rises abruptly from surrounding levels. A mountain range is a group of closely spaced mountains or parallel ridges.



Mountain Building Processes

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Mountain Building Processes

Characteristics of major mountain belts:

Size and alignment – major mountain belts tend to be very long relative to their width and tend to be aligned parallel to other ranges in the belts.

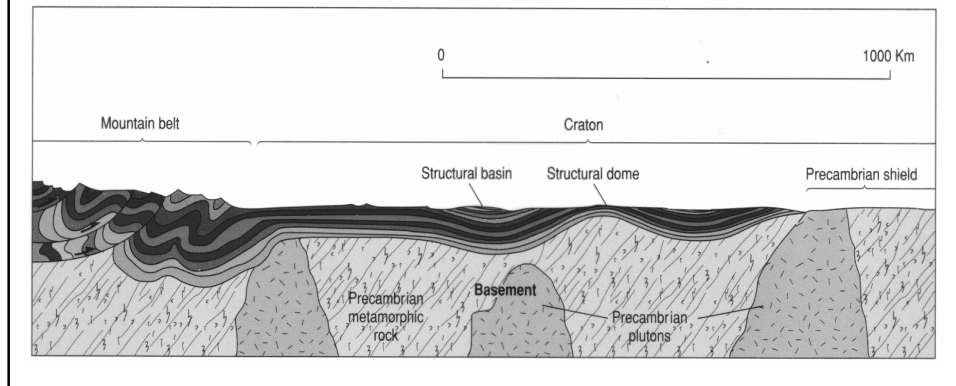
Mountain Building Processes

Characteristics of major mountain belts:

Ages – high mountain ranges tend to be younger than those mountains that are lower

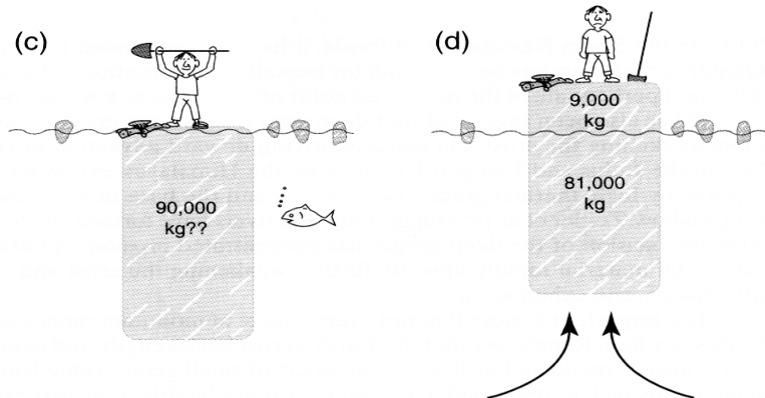
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The region of a continent that had been structurally stable for a prolonged period of time is called a **craton**. The central part of the US and Canada are part of a craton.



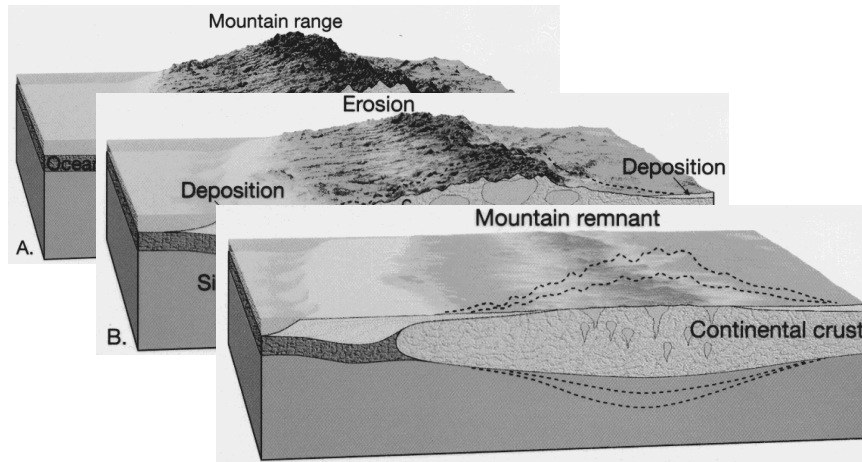
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Rock masses within the earth are balanced by the force of **isostasy**. This essentially means that heavier rock masses sink deeper into the earth while lighter rock masses float on the heavier masses. This is much the same process as an ice cube in a glass of water.



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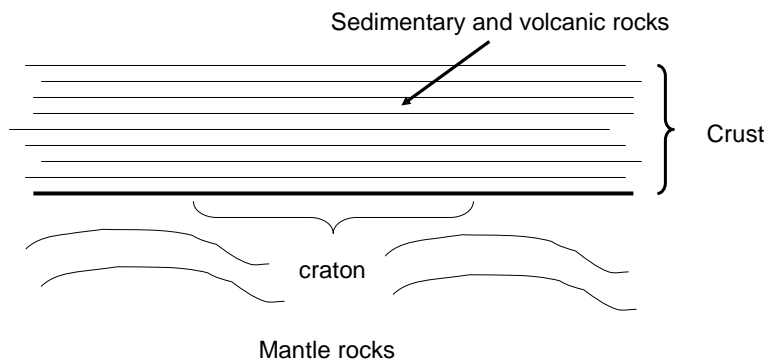
With rock masses, this process is called "**isostatic rebound**"



Mountain Building Processes

The mountain building process:

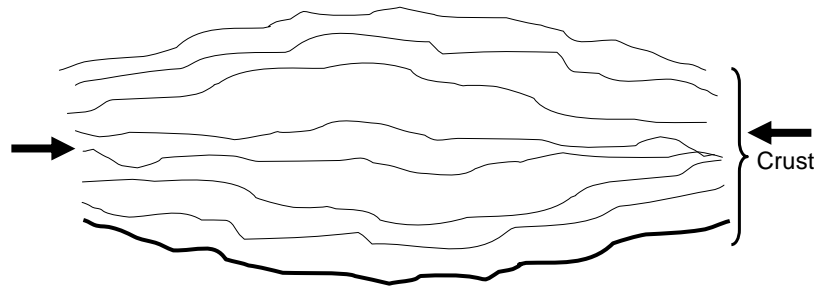
Thick sequences of sedimentary and volcanic rocks accumulate during the **accumulation stage**.



Mountain Building Processes

The mountain building process:

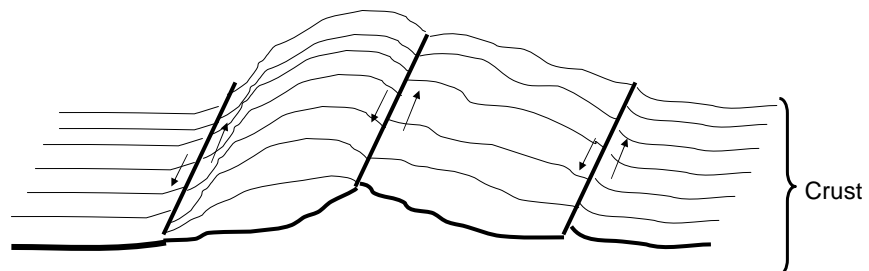
Intense deformation of the layered rocks into folds and faults along with igneous and metamorphic activity characterizes the **orogenic stage**.



Mountain Building Processes

The mountain building process:

The entire region is subjected to long periods of isostasy, often with faulting and erosion.



Mountain Building Processes

With rock masses, this process is called **"isostatic rebound"**

