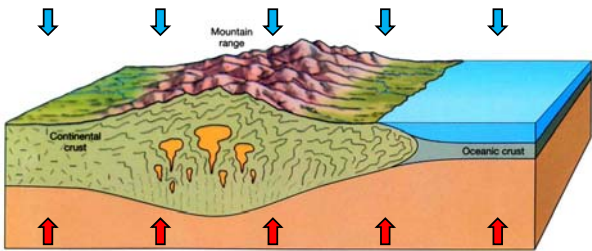


The force of gravitational attraction is related to the masses of the objects and inversely to their distance.

$$F = G \times \frac{M_1 \times M_2}{r^2}$$

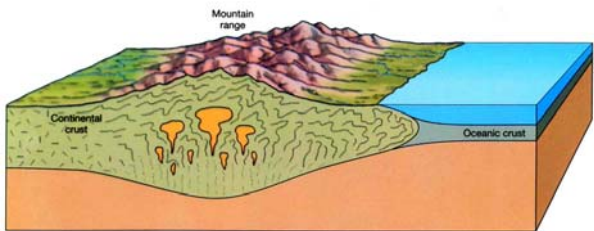
F = force of gravitational attraction
G = constant
M = mass
r = distance

The force of gravity pulls the lithosphere down; the mantle pushes the lithosphere up.



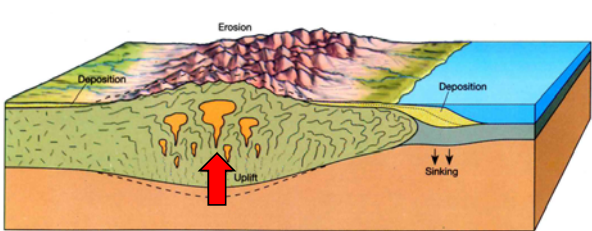
Why is continental lithosphere thicker than oceanic lithosphere?

Isostasy



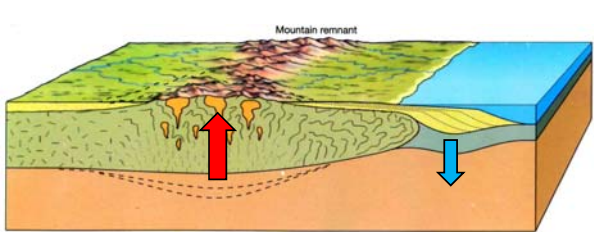
Long time ago...

Isostasy



Not as long ago...

Isostasy



Recently...

Isostasy is a mechanism where areas of Earth's crust rise or subside until the mass of the topography is buoyantly supported by the thickness of the crust which floats on denser mantle.