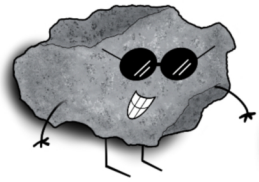
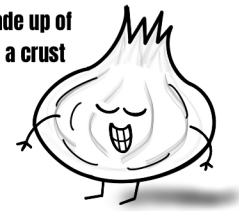
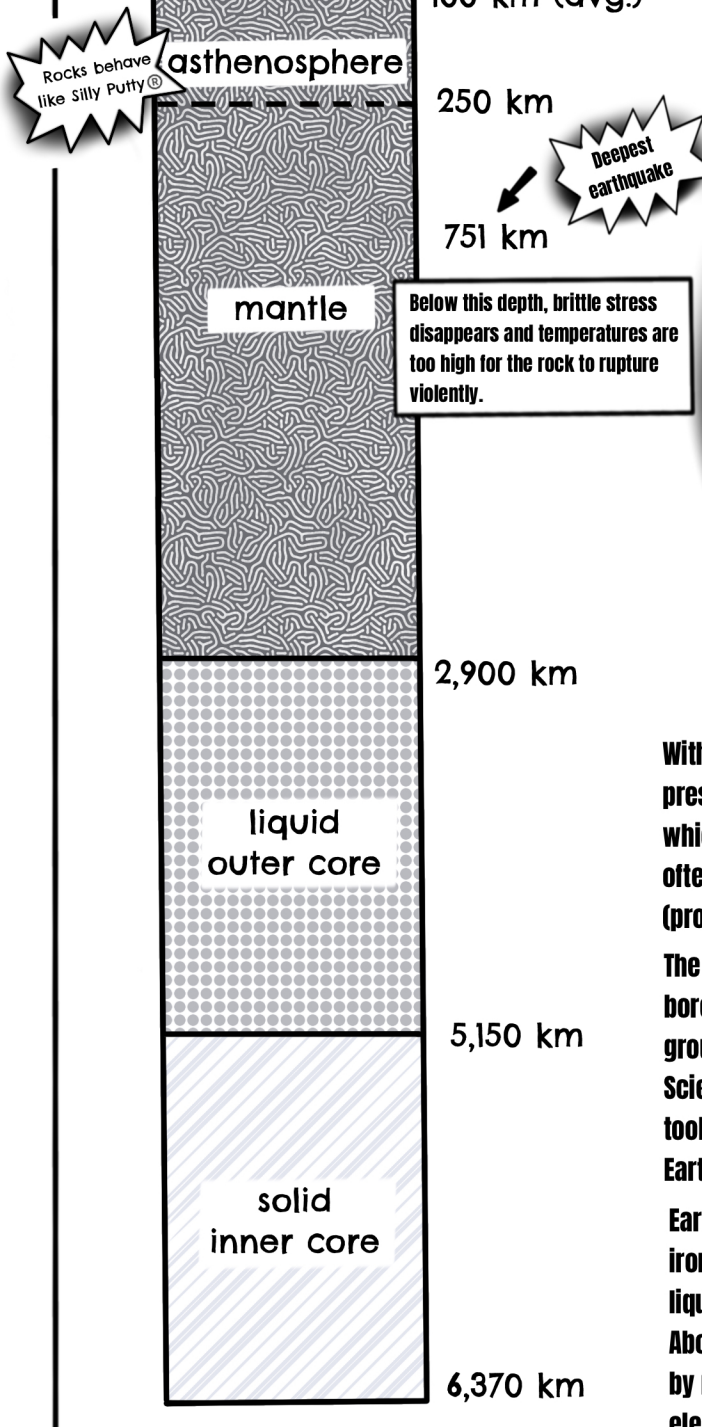
Layers of Planet Earth

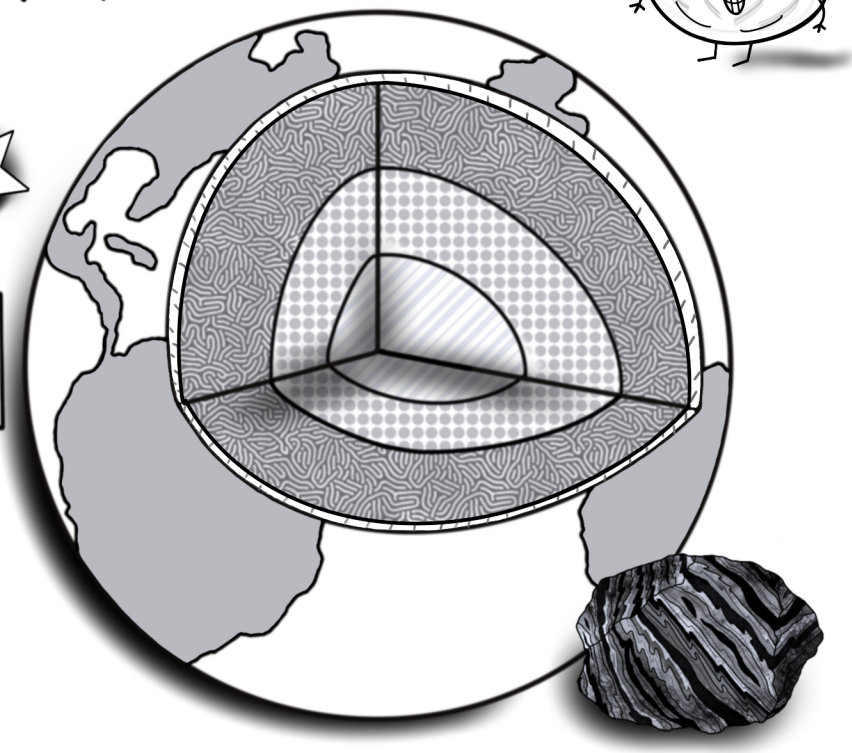


The temperature of Earth's crust increases 2.5 to 3 degrees Celsius every 100 meters of depth.

Like onions, our planet is made up of layers: a core, a mantle, and a crust packed with craters!





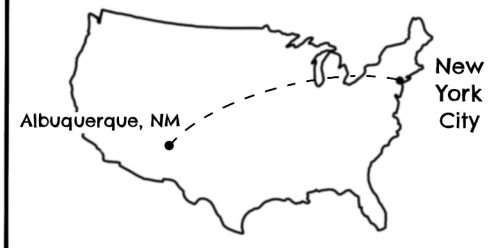


Within the asthenosphere, rocks are ductile and behave like Silly Putty. High pressure and temperature cause minerals to align in bands of similar densities, which when preserved in a metamorphic rock is a feature called foliation. It often appears as light and dark stripes, and the resulting rock is called gneiss (pronounced 'nice').

The Kola Superdeep Borehole, drilled in Russia beginning in 1970, is the deepest borehole ever drilled. It reached a depth of 12,262 meters (7.6 miles) below ground surface. This is about 1/3 of the way through the continental crust. Scientists estimate the thickness of Earth's layers using geophysics: complex tools and methods that combine geology and physics to map the interior of our Earth.

Earth's core consists primarily of iron and nickel. The outer core is liquid, and the inner core is solid. About 90% of Earth's composition by mass is made up of four elements: iron, magnesium, silicon, and oxygen.

How far is 2,900 kilometers?!



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