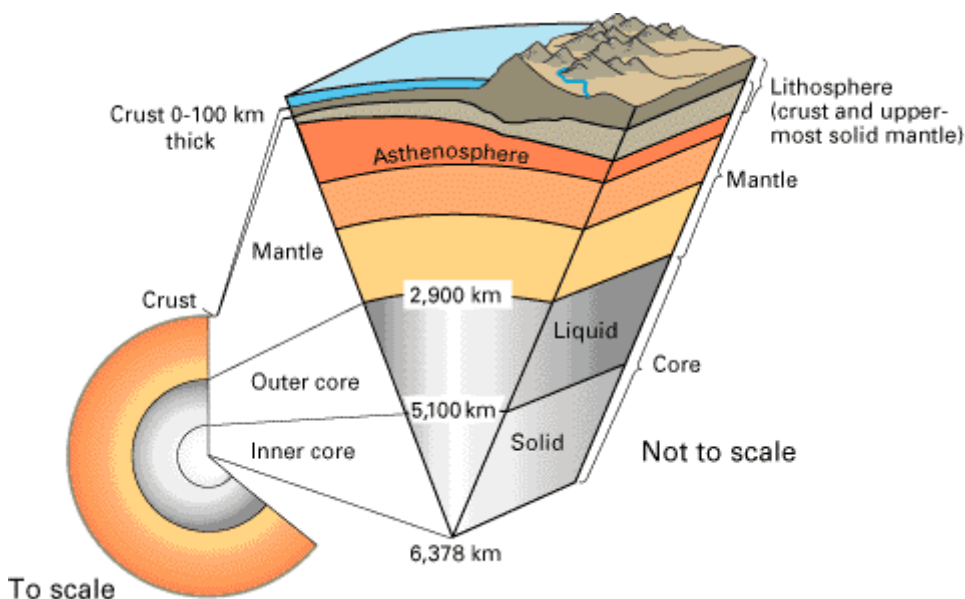


Earth's Layers

<http://pubs.usgs.gov/gip/dynamic/inside.html>



The Earth layers are: the crust, the mantle, the outer core, and the inner core.

Crust

The crust comprises the continents and ocean basins. It has a variable thickness, anywhere from 35-70 km thick in the continents and 5-10 km thick in the ocean basins. The crust is composed mainly of alumina-silicates.

Mantle

Just under the crust is the mantle. It is composed mainly of ferro-magnesium silicates. It is about 2900 km thick, and is separated into the upper and lower mantle. This is where most of the internal heat of the Earth is located.

Large convective cells in the mantle circulate heat and may drive plate tectonic processes.

Outer and Inner Core

There are two very distinct parts of the core: the outer and the inner core. The outer core is 2300 km thick and the inner core is 1200 km thick. The outer core is composed mainly of a nickel-iron alloy, while the inner core is almost entirely composed of iron. The outer core contains as much as 10% lighter elements than iron alloy. The inner core is thought to rotate at a different speed than the rest of the Earth and this is thought to contribute to the presence of the Earth's magnetic field.

Vocabulary

layer

crust

mantle

core

comprise

variable

thickness

alumina-silicates

ferro-magnesium

internal

heat

nickel-iron alloy

magnetic field

distinct

compose

contain

speed

Task 1

Write the Czech equivalents of the words above.

Task 2

Write all the metals mentioned in the text.

Task 3

Write the opposites.

outer

upper

external

Task 4

Explain what plate tectonic processes are.