

The Earth's  
Layers # 2

## The Mantle

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The mantle is the layer directly under the crust.

The mantle is composed of very hot, dense rock. This layer of rock even flows like asphalt under a heavy weight.

This flow is due to great temperature differences from the bottom to the top of the mantle.

The movement of the mantle is the reason that the plates of the Earth move.

The temperature of the mantle varies from 1600 °F at the top to about 4000 °F near the bottom.

## Outer Core

The core of the Earth is like a ball of very hot metals.

4000 °F to 9000 °F

The outer core is so hot that the metals in it are all in the liquid state.

The outer core is located about 1800 miles beneath the crust and is about 1400 miles thick.

The outer core is composed of the melted metals nickel and iron.

## Inner Core

The inner core of the Earth has temperatures and pressures so great that the metals are squeezed together and are not able to move about like a liquid, but are forced to vibrate in place as a

The inner core begins about 4000 miles beneath the crust and is about 800 miles thick.

The temperatures may reach 9000 °F.



## Review

The four layers of the Earth

Crust

Mantle

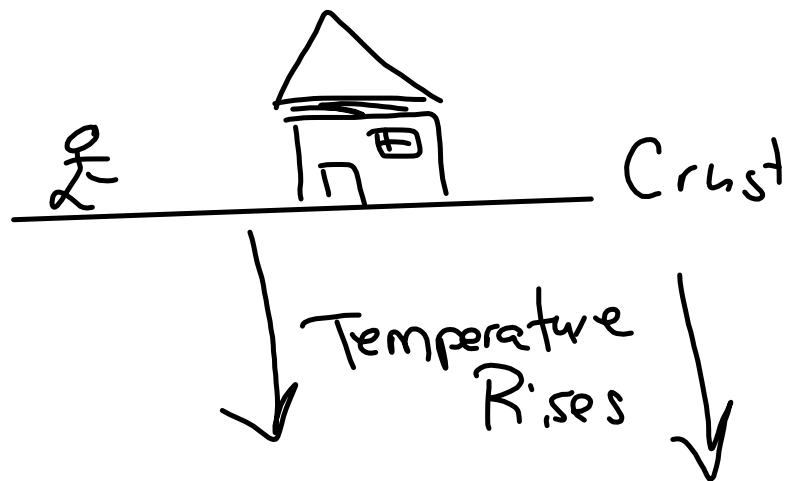
Outer Core

Inner Core

Think of an egg

- Shell → Crust
- white → Mantle
- yoke → Core

The further you go down from the Earth's crust, the hotter it becomes



Scientists believe the core is solid based on Earthquake behaviour. Solid core blocks Earthquake waves.

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