

Science - The Earth's Structure

Let's talk about the earth...

The mantle
(magma...)

Looking inside

Outer Core
(magma, but pressure causes solid parts...)

Inner Core
(Solid, nickel, iron)

What are tectonic plates?

The crust is cracked. It is like a puzzle with pieces that fit together to form the crust. Each piece is called a tectonic plate.

Why do they move?

The plates float on magma (the mantle). The magma moves as hot magma from the core rises toward the crust and cooler magma sinks. Friction from the movement pushes the plates.


What's the mantle made of?

Liquid rock.

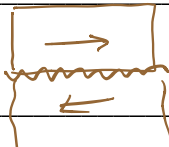
Why's it hot in the center?

In the core there are reactions happening that cause heat.

What are the three types of plate boundaries?

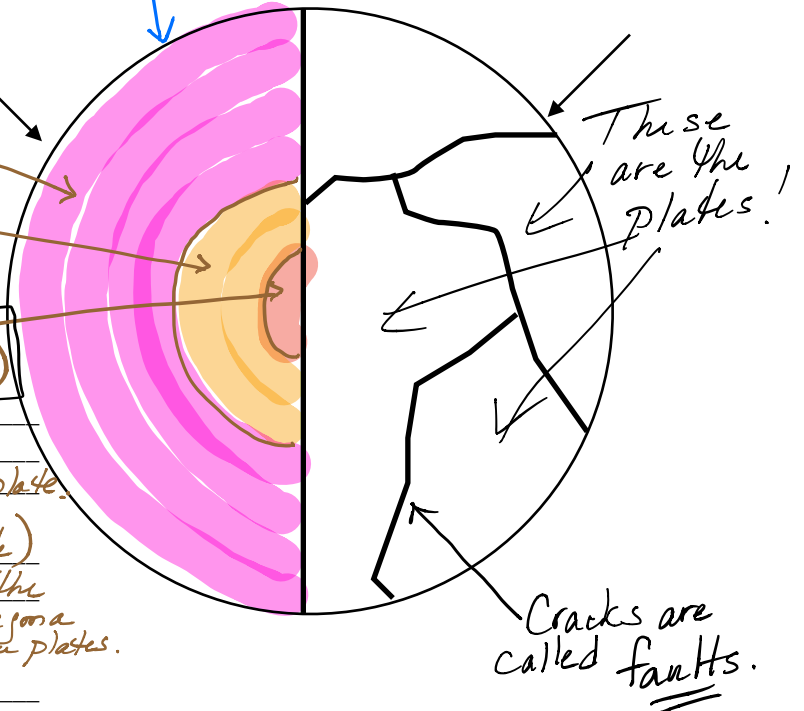
1. Convergent - pushing together 
Makes mountains

2. Divergent - pulling apart 
Makes a trench

3. Sliding - 
Causes earthquakes...

The crust (solid rock!)

Meanwhile, the outer layer is broken up...



Why is the inner core solid even though it's so hot that it should be liquid??

There is intense pressure there. Gravity is pulling everything toward the center of the inner core. This causes the molecules to be forced together into a solid.

Could we dig a hole to China? Where would we run into problems, and what would happen to us?

No...
When we hit the mantle, we would vaporize. (Turn to a gas)

What's the **thinnest** layer of the earth, and what is it made of?

The crust! It's made of solid rock.