

Structure of the Earth (layers)

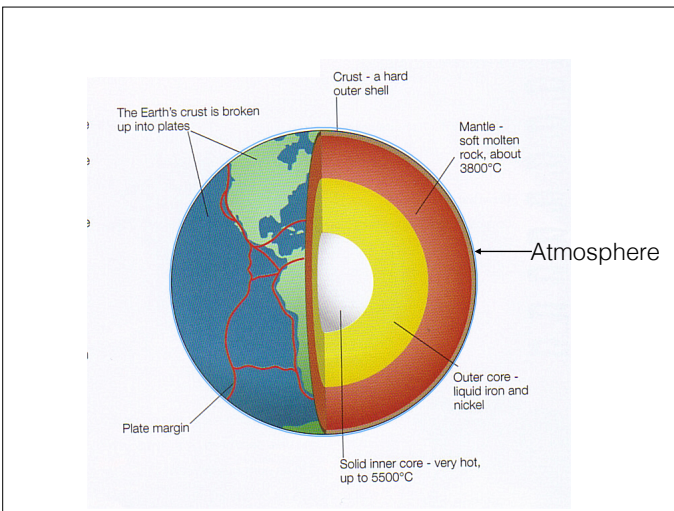
- To be able to label the core, mantle and crust, and atmosphere.
- To describe the properties of the layers if the Earth.
- To relate the properties to those of solids, liquids and gases.

cwk Structure of the Earth date

Starter: Think Pair Share

How is the Earth like an onion?

Notice that the Earth has a capital 'E'



cwk Structure of the Earth date

Task

What state are the layers of the Earth?

Why?

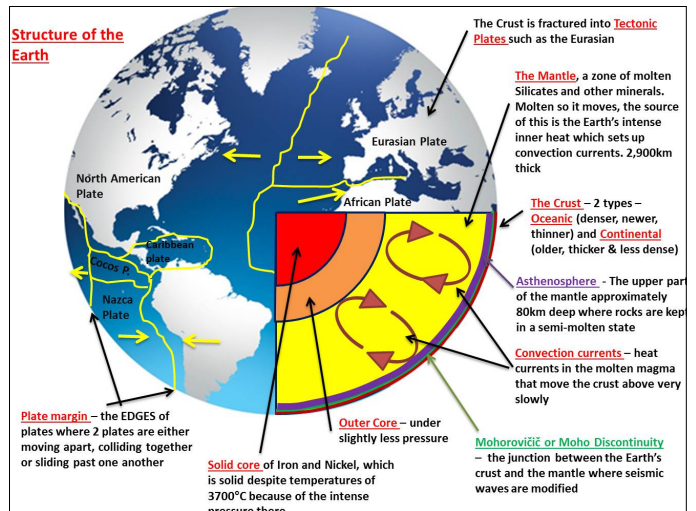
How does this affect their properties?

cwk Structure of the Earth date

Task

What state are the layers of the Earth?

Layer	Thickness	State	
Atmosphere			
Crust			
Mantle			
Outer Core			
Inner Core			Nickel & Iron



cwk Structure of the Earth date

Plenary

Describe the Earth's layers, explain with examples how they're properties are based on their state. (4)

cwk Structure of the Earth date

Plenary

Describe the Earth's layers, explain with examples how they're properties are based on their state. (4)

How many marks would you give this answer?

The centre of the Earth is the inner core, it is a solid. The second layer is the outer core and this is a liquid. The largest layer is the mantle, this is solid. The smallest layer is the crust, this is a solid. The last layer is the atmosphere which is a gas.

cwk Structure of the Earth date

Plenary

Describe the Earth's layers, explain with examples how they're properties are based on their state. (4)

The centre of the Earth is the **inner core**, it is a solid. The second layer is the **outer core** and this is a liquid. The largest layer is the **mantle**, this is solid. The smallest layer is the **crust**, this is a solid. The last layer is the **atmosphere** which is a gas.

Up to 1 Mark for stating the names of all the layers (if one is missed 1 mark)

cwk Structure of the Earth date

Plenary

Describe the Earth's layers, explain with examples how they're properties are based on their state. (4)

The centre of the Earth is the inner core, **it is a solid**. The second layer is the outer core and **this is a liquid**. The largest layer is the mantle, **this is solid**. The smallest layer is the crust, **this is a solid**. The last layer is the atmosphere which **is a gas**.

Up to 2 Marks for stating the states of all the layers (if one is missed 1 mark)

cwk Structure of the Earth date

Plenary

Describe the Earth's layers, explain with examples how they're properties are based on their state. (4)

The centre of the Earth is the inner core, it is a solid, and is made from iron and nickel, this is the densest part of the Earth.
The second layer is the outer core and this is a liquid, the magnetic metals give the Earth its magnetic field.
The largest layer is the mantle, this is mostly made of silicates and is solid but over millions of years acts like a liquid because it can have convection currents.
The smallest layer is the crust, this is where we live and contains all the minerals we use to build things, it is a solid but contains the oceans. The last layer is the atmosphere which is a gas and contains all the air we need to breathe.

cwk Structure of the Earth date

Task **Textbook Page ref:** Framework Science 8 8g.1 P76-77

- 1 Copy and complete using words from the Language bank:
The Earth's _____ is made up of rocks. A rock is formed from a mixture of _____. Minerals are usually chemical _____ which have a definite _____. The main rock types are _____, _____ and _____.
- 2 List these in order of size, smallest first:
rock fragment, atom, molecule, grain.
- 3 Hannah's two rock samples were the same size and she put each into the same volume of water. After half an hour she noticed the water level in the sandstone beaker was lower. Explain why, including sketches of the grains in your answer.