L/O To investigate the Earth's processes and explain how they have shaped the land.

To be able to identify the different types of hazards

To describe the layers of the Earth and their key characteristics.

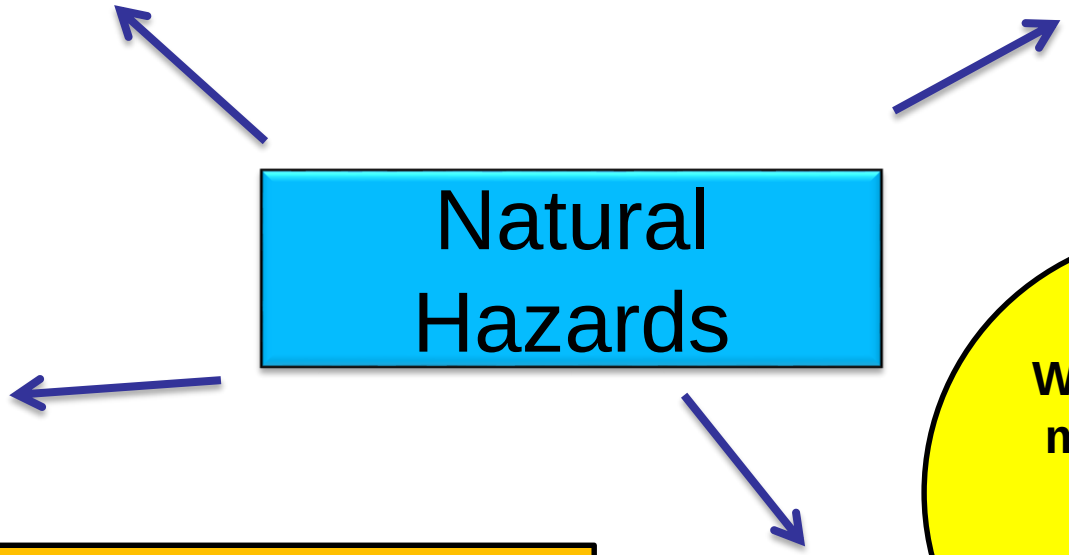
To explain how convection currents have caused the tectonic plates to move.

Starter:

What is the most famous natural disaster you know about?

Complete a 5W task – Who, What, Where, When and How?

What do you already know?



Write down as many natural hazards as you can remember!!

Stretch Yourself: Circle all the hazards to do with weather or water. Square all the hazards to do processes inside the Earth's surface.

Starter Activity

- Watch this video clip

  http://www.youtube.com/watch?v=4Y-62Ti5_6s

Think about the following questions:

What is happening?

Why is this happening?

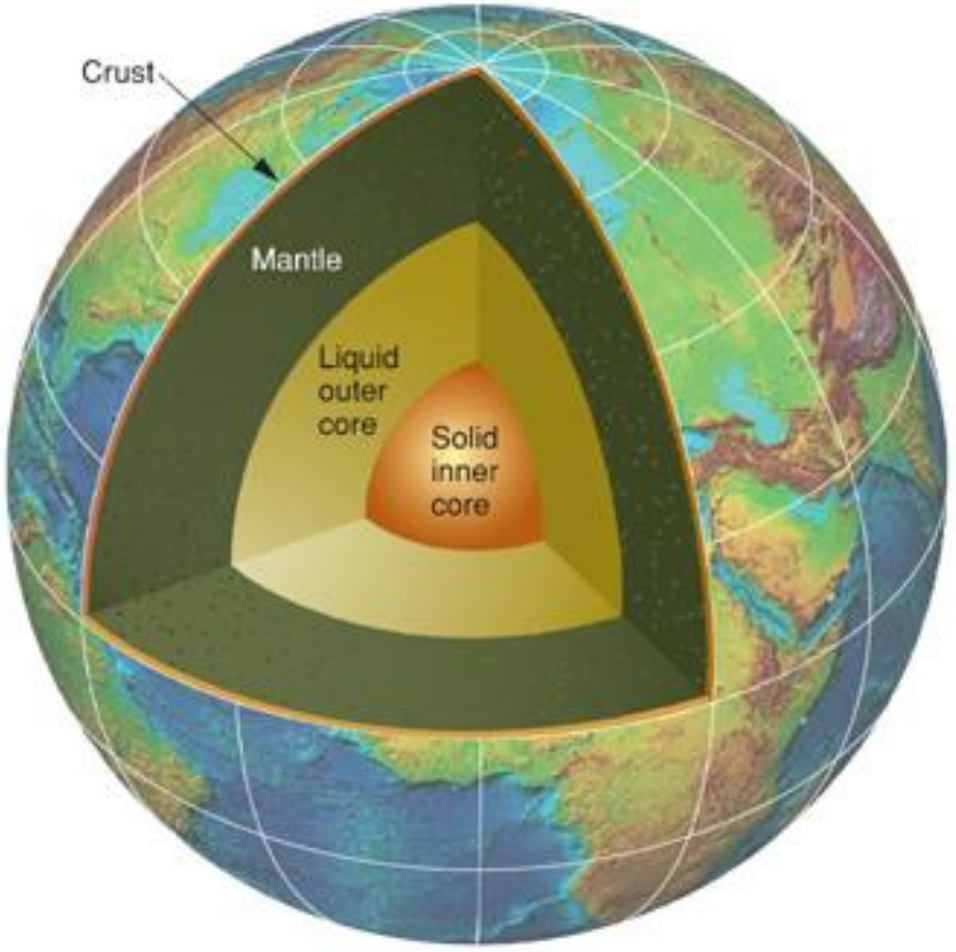
How is this happening?

When does this happen?

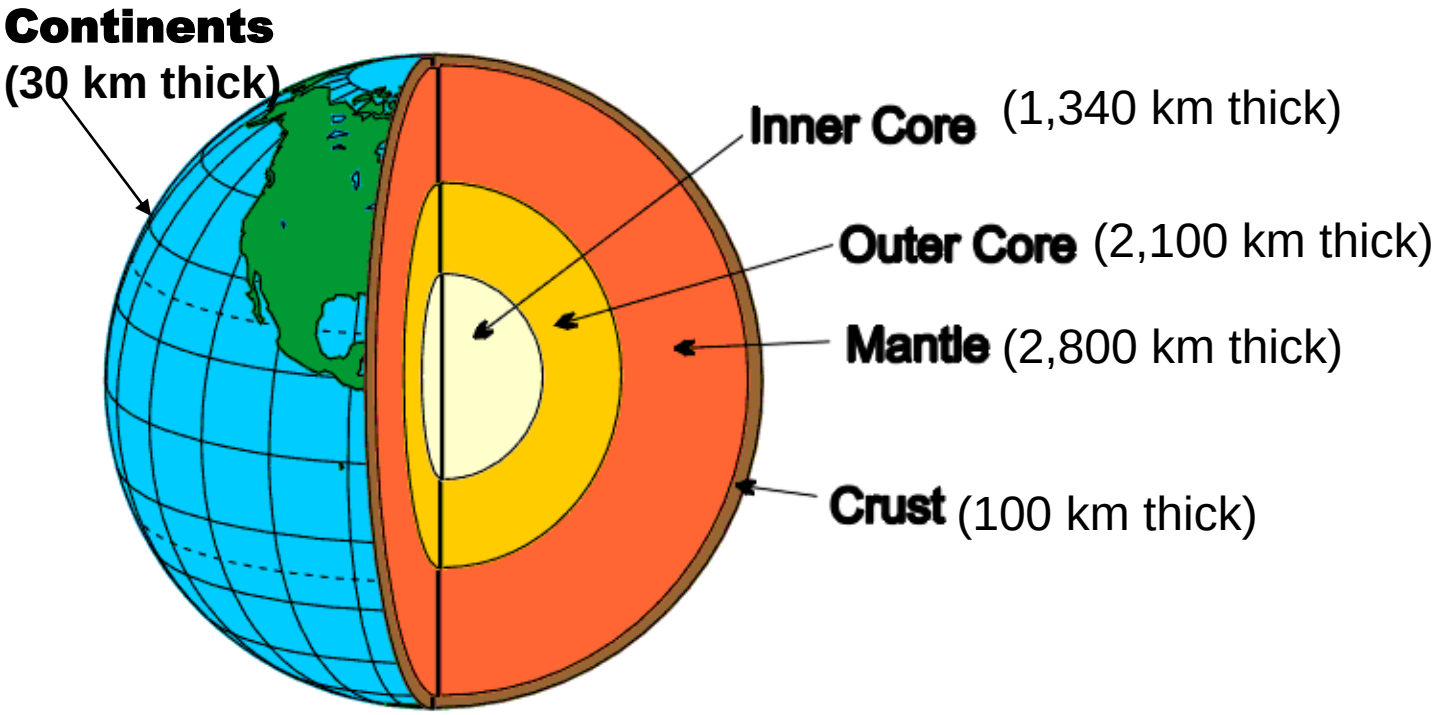
What is the earth made up of?

The earth is just like a giant apple. It has a thin layer called the **crust**, a softer part called the **mantle** and a liquid centre called the **core.**

Some time after the earth formed, it got so hot that everything inside it melted. The heavier substances in the liquid sank and the lighter ones rose, forming layers. As the earth cooled, most of the layers turned solid.



Structure of the Earth: Task 1: Copy the diagram.



- **Task 2: Imagine you have created a machine which can tunnel through the earth. Describe your journey to the core.**

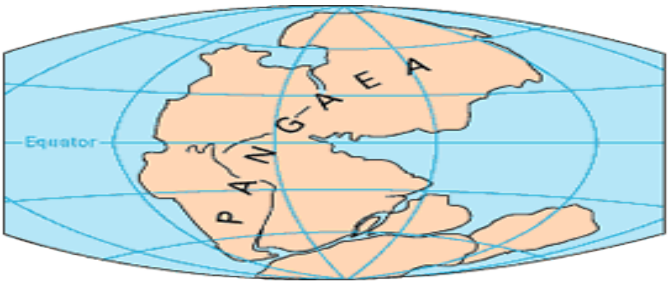
Describe what the layers are like at each stage. Make the story as adventurous as you can!!

- Earth was formed 4,600 million years ago.
- Since then it has been slowly cooling down and a thin **crust** has formed round the outside.

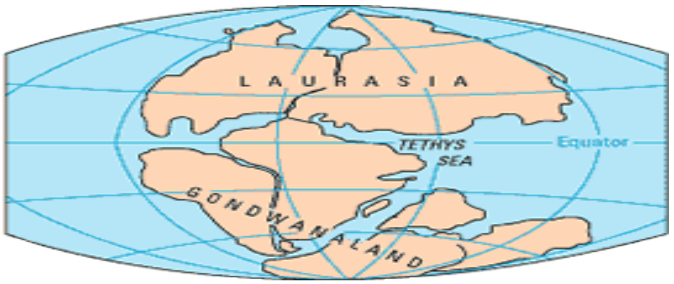
- The crust is broken into several enormous sections.
- The plates float above hot **molten**

- The place where 2 sections/plates meet is called a **plate boundary**
- The movement of these plate cause volcanoes & earthquakes.

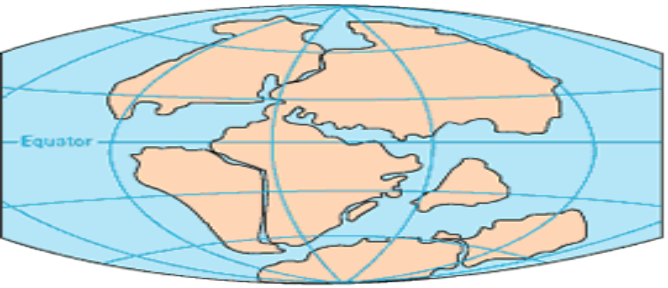
Now, the Earth's surface hasn't always look the way it does today. And it won't stay the same! Watch the following clip to see what has, what is and what will happen in the future.



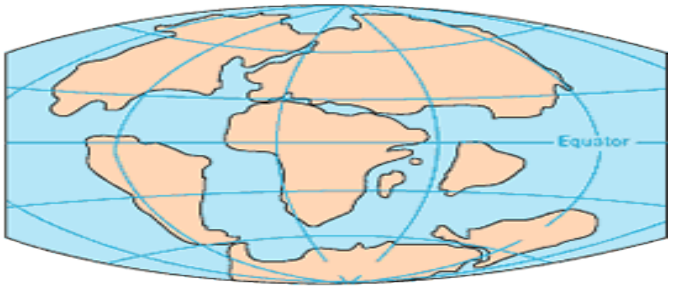
PERMIAN
225 million years ago



TRIASSIC
200 million years ago



JURASSIC
135 million years ago



CRETACEOUS
65 million years ago

PRESENT DAY

http://www.youtube.com/watch?v=NYbTNFN3NBo

Using the video we have just watched, and the diagram below, complete the sequencing activity by cutting out the cards and placing them in the correct order.

Use pages 10 to help if you get stuck.

Y1dmE&feature=related