



---

ISAAC NEWTON  
ACADEMY

**GCSE Geography 2016-17:**

**Hazardous Earth**

**Summer Holiday Independent Learning**



## **Climate Change**

Write a short paragraph describing your understanding of climate change (without researching it).

---

---

---

---

---

---

Watch both video clips and answer the question below –

<https://www.youtube.com/watch?v=Sv7OHfpIRfU>

<https://www.youtube.com/watch?v=ddu80ZFk5tk>

What are the differences between natural climate change and climate change caused by humans? (Give examples for each)

---

---

---

---

---

---

How has your understanding of climate change changed?

---

---

---

---

## **Extreme Weather**

Find the definition of:

- An extreme weather event

---

---

---

---

- A tropical cyclone

---

---

---

---

Hurricane Katrina, 2004 – an extreme weather event!

Watch the clip which follows the path of Hurricane Katrina.

Think about how and where the hurricane is formed and why there is so much devastation caused.

<https://www.youtube.com/watch?v=HbJaMWw4-2Q>

---

---

---

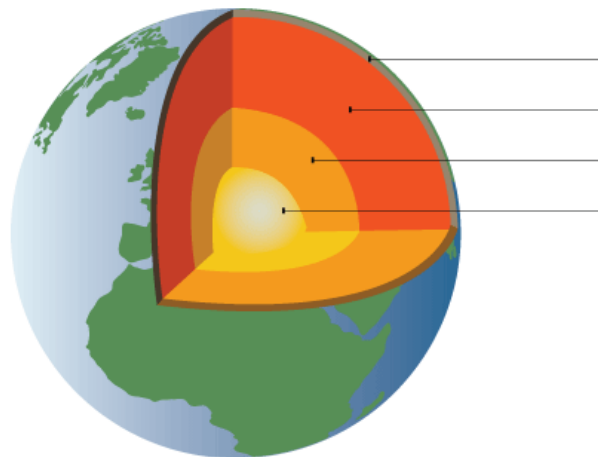
---

---

### **Structure of the Earth**

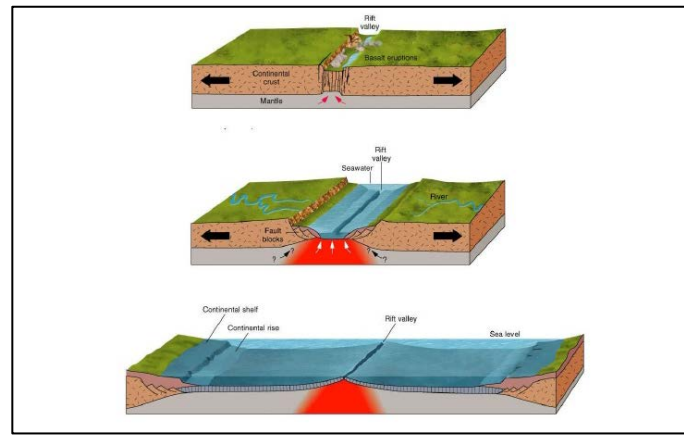
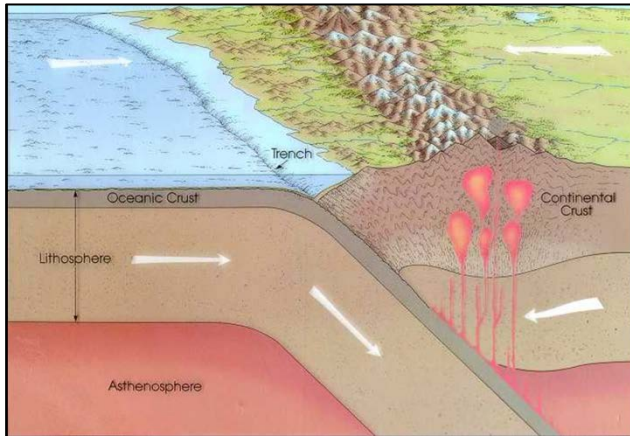
Label the diagram of the structure of Earth:

- |                   |
|-------------------|
| <b>Mantle</b>     |
| <b>Inner Core</b> |
| <b>Crust</b>      |
| <b>Outer Core</b> |



## Tectonic Plate Boundaries

Match the description to the correct diagram



### Divergent plate boundary

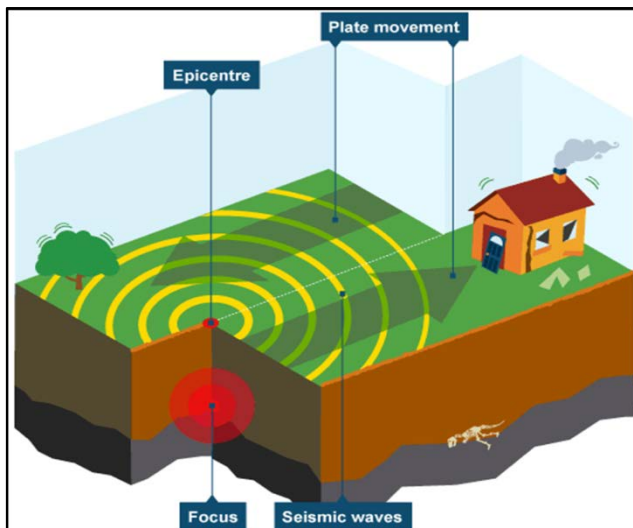
**Convection currents** can also cause the plates to move apart. This type of movement mostly happens under the oceans. As the plates break apart, rising heat and a reduction in pressure cause the **asthenosphere** to melt forming magma. The magma rises to fill the gap and cools to form new **oceanic lithosphere**. Where the magma breaks through the surface of the Earth, it forms a shield volcano. This can lead to a chain of volcanoes as the process continues and earthquakes can also occur.

### Conservative plate boundary

**Convection currents** cause the plates to slide past each other. Plates tend to get stuck at some point. Pressure builds along the boundary until one plate jerks past the other, causing an **earthquake**.

### Convergent plate boundary

Convection currents in the mantle cause the plates to move towards each other. Where an **oceanic plate** meets a **continental plate**, the denser oceanic plate sinks under the less dense continental plate into the asthenosphere. This process is called **subduction**.



**Earthquakes in a developed and developing country**

**1. The Tohoku Earthquake, Japan, 2011:**

<http://www.ibtimes.co.uk/2011-earthquake-tsunami-60-powerful-photos-disaster-that-hit-japan-five-years-ago-1548255>

Follow the above web link and look at the photos of the aftermath of the earthquake.

**Write down 10 sentences about them** – include the impacts of the earthquake (social, economic, emotional, environmental), something that shocked you and something you had expected to find in the photos.

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

**2. The Nepal Earthquake, 2015:**

Write down 5 significant facts from this article reporting on the earthquake:

<http://www.bbc.co.uk/news/world-asia-32479909>

---

---

---

---

---

---

---

---

---

---

**Keywords:**

Find out the meaning of the following:

1. Inter-tropical Convergence Zone (ITCZ) -

---

---

2. Greenhouse gas -

---

---

3. Storm Surge -

---

---

4. Convection currents -

---

---

---

5. Primary impact -

---

---

6. Secondary impact -

---

---

7. Aid -

---

---

8. Epicentre -

---

---

9. Focus (of an earthquake) -

---

---

10. Liquefaction -

---

---