



Urmston Grammar Sixth Form – Transition Work Geography Department

A Level Geography: ‘Hazardous Earth’ Transition Work

We follow the OCR specification - <https://www.ocr.org.uk/qualifications/as-and-a-level/geography-h081-h481-from-2016/>

“Every year, natural disasters affect one in thirty people on Earth. Whether developing or industrialised, all nations are at risk, and the field of natural hazards is today one of the fastest growing areas of research in the Earth and Climate Sciences.”
– University College London, Earth Sciences Department

Movement of the Earth’s land masses, from Pangaea to present day are evidence that forces beneath our feet are at work. Seismic and volcanic activity creates hazards as populations have grown and inhabited more of the Earth. Although hazardous, earthquakes and volcanoes create new landforms and can support life on Earth from flora and fauna to populations.

As technology has evolved, the capacity to predict and mitigate against tectonic hazard events has improved although the impact of an event can leave communities and countries devastated. Risks from tectonic hazards varies spatially and over time, with continued research and development there may be a point in the future when it will be possible to mitigate against the vulnerability to risk.

Currently there are a number of strategies which help the international community, governments and individuals cope with the risks associated with tectonic hazards however there are varying global levels of resilience and ability to adapt to the risks presented

Task 1 – Increasing your subject specific vocabulary.

Create a list of definitions (ensuring they link with tectonics), you must include the words listed below. Additionally, you might also include other words you come across during your reading/research and through watching relevant documentaries/TedTalks etc.

Continental Fit	Lithosphere	Asthenosphere
Magnetic Reversal	Mid-ocean ridge	Palaeomagnetism
Sea-floor spreading	Transform fault	Destructive plate boundary
Divergent plate boundary	Convergent plate boundary	Collision plate boundary
Mountain-building	Tectonic plate	Continental crust
Oceanic crust	Convection current	Slab-pull, ridge-push

Task 2 – Factors that can impact a countries ability to respond to tectonic hazards

Compile two fact file of either a Volcanic eruption, or Earthquake event in the 21st century. One fact file should be for an Advanced Country (AC) & one should be for an Emerging Developing Country (EDC) OR a Low-income developing country (LIDC).

You should include:

- Locational information
- Causes of the hazard
- Impacts of the hazard – primary & secondary
- Responses to the hazard – short term & long term



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Extra reading/activities that you might wish to do:

Books to read –

- Disaster by Choice - Ilan Kelman
- Eruptions That Shook the World – Clive Oppenheimer
- The Big Ones – Lucy Jones
- Super Volcanoes: What They Reveal about Earth and the Worlds Beyond – Robin George Andrews

Many more can be found here - <https://www.goodreads.com/shelf/show/food-security>

Documentaries to watch –

- **Into the Inferno – Netflix**

Directed by Werner Herzog, this documentary features volcanologist Clive Oppenheimer as they explore active volcanoes around the world, examining their impact on human cultures and beliefs.

- **Voyage of the Continents – Prime**

This series explores the formation and evolution of Earth's continents through the lens of plate tectonics, highlighting how landmasses assemble and separate, fuelling geological activity

- **Earth: The Power of the Planet – iPlayer**

Presented by geologist Dr. Iain Stewart, this episode delves into the role of volcanoes in Earth's history, exploring how they have shaped the planet's landscape and atmosphere.

- **Volcano: Rescue from Whakaari – Netflix**

This gripping 2022 documentary, directed by Rory Kennedy, provides a minute-by-minute account of the tragic volcanic eruption that occurred on Whakaari (White Island) in New Zealand in December 2019. The eruption claimed 22 lives and left many others with severe injuries. The film features firsthand accounts from survivors and rescuers, complemented by real-time footage, offering a visceral portrayal of the disaster and the human stories intertwined with it.

Websites to visit –

USGS – Earthquakes Hazard Programme – www.earthquake.usgs.gov

British Geological Survey – [Welcome to BGS - British Geological Survey](http://www.bgs.ac.uk)

Geology.com – Plate Tectonics Section [Plate Tectonics Theory, Diagrams, Boundaries - GEOLOGY.COM](http://www.geology.com/plate-tectonics)

Volcano Discovery – [www.Volcanodiscovery.com](http://www.volcanodiscovery.com)

PMT - [Detailed Notes - Tectonics - Edexcel Geography A-level.pdf](#)

PMT – Glossary - [Glossary of Definitions - Tectonics - Edexcel Geography A-level.pdf](#)