

Sets (s): All Y10 classes.

YEAR 10

LP2

SUBJECT Geography

Knowledge Focus: Tectonic Processes.



Ysgol Uwchradd
Prestatyn
High School

This half term: Skills, knowledge and understanding to be developed:

How do tectonic processes work together to create landform features at different scales?

What are the impacts of tectonic processes?

Key Terms to be learned this half term:

Convection, subduction, divergence, Constructive / destructive margin, volcano (volcanoes), ocean ridges, ocean trenches, rift valley, island arcs, fold mountains. Lava flows, pyroclastic flows, ash fall, liquefaction, landslides, tsunamis, lahar, mudflow. Primary effects, secondary effects, thermal image, tiltmeter, gas readings, seismometer, Emergency planning, hazard mapping, land-use planning.

Week 1 and 2 Learning Objectives etc:

- understand and have an overview of the global distribution of tectonic activity and its link to plate movement and boundaries.
- describe and explain large scale processes (convection, subduction and divergence) at constructive and destructive margins and understand resulting large scale features to include rift valleys and ocean trenches.



Objective assessments:

How do tectonic processes work together to create landform features at different scales?

Homework:

Complete key word definitions for tectonic Processes and landforms.

Week 3 and 4 Learning Objectives etc:

- understand and explain the concept of volcanic hotspots (*eg Hawaii*).
- describe and explain the processes which result in distinctive volcanic landscape features:
 - **Larger scale** features to include shield volcanoes, stratovolcanoes, caldera etc.
 - Smaller scale features to include cinder cones, lava tubes and geysers



Objective assessments:

How do tectonic processes work together to create landform features at different scales?

Homework:

Research Iceland. How has the Thingvellir Rift Valley formed? Where do rift valleys occur?

Week 5 and 6 Learning Objectives etc:

SA: Tectonic processes and landforms.

- Describe and explain the physical and human factors that increase vulnerability to tectonic hazards.
- Understand the features of a located volcanic eruption and an earthquake (case studies to exemplify points studied so far).



Objective assessments:

SA: Tectonic processes and landforms.

What are the physical and human factors that increase vulnerability to tectonic hazards?

What are the characteristics, and impacts of tectonic processes?

Homework:

Research the Hawaiian volcanoes – how are they formed? Which is the oldest and youngest volcano?

Week 7 Learning Objectives etc:

- Explain how monitoring, hazard mapping, new building technology and improved emergency planning may be used to reduce the risks associated with earthquakes, tsunamis and volcanic eruptions.



Objective assessments:

How might the risks associated with tectonic hazards be reduced?

Homework:

Research a volcanic eruption e.g. Montserrat. Explain how it is monitored and look at how well the monitoring has protected people and properties e.g. land use zoning, evacuations etc. have protected