



Year 12 Geography Transition Work

Physical Geography – Tectonic Processes and Hazards

1. You will need to make sure that you have completed the GCSE unit of work on 'Tectonic Hazards' (see resources in the Year 11 School Closure Folder). This will involve you completing your notes on this topic and to help you do this there is an overview of the topics that you need to be aware of in the table below. If you have not looked at this unit of work at GCSE, or there are elements of the unit that you have not studied or you are unsure about, please email either Miss Chaddock or Mr Wilson (emily.chaddock@carres.uk or matthew.wilson@carres.uk). This work will form the basis to the classroom-based assessment at the start of the new academic year. The assessment will involve you answering GCSE style questions on the tectonic hazards unit.

Key idea	Specification content
Earthquakes and volcanic eruptions are the result of physical processes.	Plate tectonics theory i.e. brief overview of Alfred Wegener, convection currents, slab pull and ridge push Global distribution of earthquakes and volcanic eruptions and their relationship to plate margins. Physical processes taking place at different types of plate margin (constructive, destructive and conservative) that lead to earthquakes and volcanic activity.
The effects of, and responses to, a tectonic hazard vary between areas of contrasting levels of wealth.	Primary and secondary effects of a tectonic hazard. Immediate and long-term responses to a tectonic hazard. Use named examples (e.g. Nepal and New Zealand earthquakes) to show the causes and effects and responses to a tectonic hazard and how and why they vary (between two areas of contrasting levels of wealth).
Management can reduce the effects of a tectonic hazard.	Reasons why people continue to live in areas at risk from a tectonic hazard. How monitoring, prediction, protection and planning can reduce the risks from a tectonic hazard.

2. Complete the glossary of key terms on page 2-4.
3. Research and compile **three** detailed case studies looking at tectonic hazards. You should look at a case study of an **earthquake event, volcanic eruption** and a **tsunami event**. These must be different to examples that you have studied at GCSE and should have occurred within the **last 10 years**. You should look at countries at different levels of economic development i.e. **at least one** should be from a **developing country** and **at least one** should be from a **developed country**.

You should gather together information on the following:

- The **cause** of the event e.g. plate boundary, names and types of plates, tectonic processes.
- The **hazards** associated with this event e.g. lava, pyroclastic flows, liquefaction, landslides.
- The **specific effects** of the tectonic event e.g. social, economic, environmental, short and long term.
- Management strategies** used to reduce the impacts e.g. earthquake proof structures, education and planning, monitoring.

We would encourage you to incorporate maps, photos and diagrams into your work and each case study should be **at least a page of typed work** (excluding visuals). **PLEASE ENSURE THAT THE GLOSSARY OF TERMS AND CASE STUDIES ARE PRINTED OFF AND SUBMITTED TO YOUR PHYSICAL GEOGRAPHY TEACHER IN THE FIRST TWO WEEKS OF THE COURSE..**

Glossary for tectonic processes and hazards

Term	Definition
<i>Asthenosphere</i>	
<i>Ash</i>	
<i>Benioff zone</i>	
<i>Bomb (lava)</i>	
<i>Collision zone</i>	
<i>Cone</i>	
<i>Conservative margin</i>	
<i>Constructive margin</i>	
<i>Continental drift</i>	
<i>Core</i>	
<i>Crater</i>	
<i>Crust</i>	
<i>Destructive margin</i>	
<i>Epicentre</i>	

<i>Fault</i>	
<i>Focus</i>	
<i>Fold mountain</i>	
<i>Hot spot</i>	
<i>Hypocentre</i>	
<i>Island arc</i>	
<i>Jokulhlaup</i>	
<i>Intra-plate</i>	
<i>Lahars</i>	
<i>Lava</i>	
<i>Liquefaction</i>	
<i>Lithosphere</i>	
<i>Lithospheric plate</i>	
<i>Love wave</i>	
<i>Magma</i>	

<i>Mantle</i>	
<i>Nuée ardente</i>	
<i>Oceanic trench</i>	
<i>Palaeomagnetism</i>	
<i>Primary wave</i>	
<i>Pyroclastic material</i>	
<i>Rayleigh wave</i>	
<i>Rift valley</i>	
<i>Sea-floor spreading</i>	
<i>Secondary waves</i>	
<i>Subduction</i>	
<i>Tsunami</i>	
<i>Alfred Wegener</i>	