

Year 9 Annotated Work Examples

Clear Presentation
of classwork with
the date and title
neatly underlined
with a ruler.

C/W Monday 16th September 2024
How Do Plates Move?

Key terms

Tectonic plates □ The Earth's outermost layer, the lithosphere, is divided into independently moving plates into which the continents are embedded. □ The plates "float" on a layer called the asthenosphere.	Convection □ The movement caused within a fluid by the tendency of hotter and therefore less dense material to rise, and colder, denser material to sink under the influence of gravity, which consequently results in transfer of heat.
Plate Margin (Boundary) – The boundary between two (or more) of the plates that form the upper layer of the Earth (the lithosphere) and together cover the surface of the Earth. – Plate margins are characterized by a combination of tectonic and topographic features.	Earthquake □ A sudden violent shaking of the ground, typically causing great destruction, as a result of movements within the earth's crust or volcanic action.
	Volcano □ A mountain or hill, typically conical, having a crater or vent through which lava, rock fragments, hot vapour, and gas are or have been erupted from the earth's crust.

C/W Tuesday 24th September 2024
Convection currents and plate movement

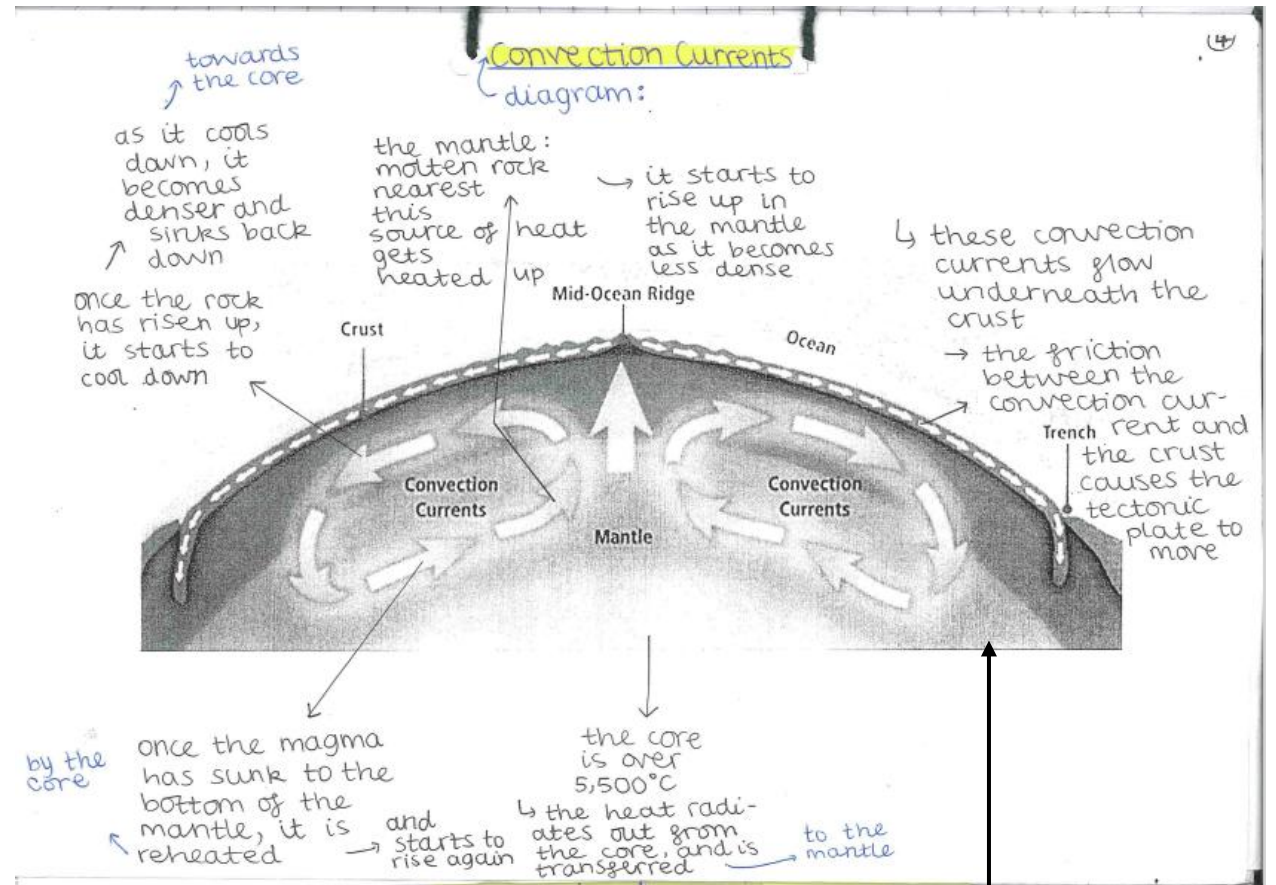
• <u>Continental Crust</u> - thick (20-200 km) - composed mainly of granite rock - less dense - is not destroyed - old: up to 3.8 B 7 years old (billion)	• <u>Oceanic Crust</u> - thin (5-10 km) - dense - young (<200 My) - formed of basaltic rock - sinks when it meets continental plate - recycled at destructive margins
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Key Definitions are
emphasised in the
notes for students
to return to in the
topic or as part of
revision.

Class notes are
neatly organised
with the use of sub-
headings and
columns if required.

Diagrams are required to be drawn in pencil in Geography and lines drawn with a ruler.

C/W Thursday 26 th September 2024 What happens at plate boundaries?	
Types of volcano:	
↳ Shield Volcano	Composite Volcano
• Constructive plate boundaries	• Andesitic lava: viscous + thick ↳ magma chamber
• Gentle eruptions due to little pressure build-up	• Destructive plate boundaries
• Thin and runny lava ↳ (basaltic lava)	• Explosive eruptions due to excessive pressure build-up ↳ (high)
• Frequent eruptions	• Seldom eruptions ↳ (infrequent)



Visual representations are provided to the students of physical processes with them broken down into a step-by-step process to break it down for student understanding.

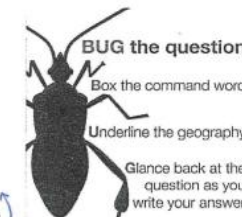
W
Tuesday 5th November 2024



Colour can be used in the diagrams to demonstrate a difference between aspects of the drawing and demonstrate temperature or land use change.

9 mark questions are a new type of question for GCSE. Therefore, supported planning sheets are provided to the students to help with them summarising their ideas and deciding on their line of argument.

Practice Question: "To what extent do the effects of a tectonic hazard vary between areas of contrasting wealth? Use one or more named examples in your answer." (9 marks)



The Golden Judgements of Geography:

Task: Using the content you have been taught over the last couple of lessons, complete the below table with evidence about the responses to the Chilean and Nepalese earthquakes. ^{+30,000 shelters} ^{Cost: \$30 billion} ^(3 million homeless) ^{Cost: \$56 billion}

Housing reconstruction plan		Time	Short Time	Long Time	Socio-Economic	Knock-On Effects	Environmental
- Around 500 people died; 12,000 were injured; 800,000 affected; 220,000 homes, 4,500 schools and 53 ports were destroyed. - Critical infrastructure like 'Talcahuano Port' and 'Santiago Airport' was badly damaged, hampering recovery efforts and trade. - Many areas lost access to electricity and water, estimated damage being \$30 billion.			~200,000 homes	- Landslides damaged 1,500 km of roads, isolating remote communities like 'Concepción' for days. - Several coastal towns like 'Constitución' were devastated by the tsunami-affecting infrastructure. - A fire at a chemical plant near 'Santiago' resulted in the evacuation of the surrounding area.	- In 'Kathmandu', over 8 million people were affected: 9,000 deaths and 20,000 injuries (1/3 of population). - Electricity, water supplies, sanitation and communication were severely disrupted. 7,000 schools destroyed, leading to disruption in education. - Overwhelmed medical facilities	- The earthquake triggered landslides and avalanches - 19 climbers on Mount Everest dead. - In the 'Langtang' region, an avalanche left 250 people missing - challenge for recovery in remote areas. - A landslide blocked the 'Kali Gandaki River', causing flood risks and evacuation.	

Line of Argument: The Nepal earthquake caused more severe (long-term) effects at a large scale due to the country's high population density, low level of wealth and greater reliance on external aid. ^{90% restored} ^{→ to a large extent} ^{→ -} ^(national)

9-mark Questions:

B ox the command word/phrase

U nderline the key words

G lance back at the number of marks

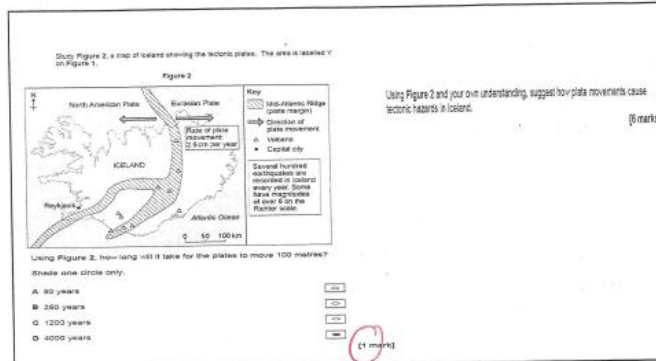
↳ 'To what extent': 3 x PEEL paragraphs (2A + D vv)

↳ In each paragraph, you must refer to both of the earthquakes (Chile and Nepal).

C: (L) Why is your counter-argument weaker? (conclusion)

In addition, as 9 mark questions are a new type of question for GCSE a clear structure is provided to students as to how they should approach the question.

Marked Piece Feedback will involve the teacher providing key feedback on how students should approach the questions and tips for similar questions in the future.



→ This is an example of ridge push, where the plates move away from the ridge* (as it is elevated), and new land is formed as a result of gravity. Hazards include earthquakes as a result of the tectonic plates causing friction, and shield volcanoes. This whole process of plate movement is caused by 'convection currents'. This is when the heat from the earth's core provides energy to the mantle, and the molten rock rise up as a result of becoming less dense, and sink back down as they get cooler and denser. The cycle of convection currents means that there is friction between the crust and the convection currents, making the tectonic plates to move. As volcanoes form, for example, (shield), magma rises. Likewise, the epicentre** influences the epicentre to feel the seismic waves.

① Explain how an earthquake happens and what hazards that it causes.
 ↳ An earthquake happens when the tectonic plates cause friction when they rub against each other, causing hazards like tsunamis and floods.
 Challenge Question: Explain why this would be different at a destructive plate boundary.
 ↳ At a destructive plate boundary, this is different because one of each crust is involved (oceanic and continental), with hazards such as tsunamis and composite volcanoes (subduction and slab pull occurs).

Marked Piece Feedback will enable the students to answer target questions in full sentences based on mistakes that they have made in their answer, or a challenge question will be set to stretch students' thinking.

- Marked Piece - Feedback

• Explain 6-mark question:

↳ 2x PEE paragraphs

point evidence explain

- This is because...

Explain

NO link! or conclusion!

• Suggest 6-mark question:

↳ 2x PEEL

NO conclusion!

↳ link

• Use Figure: you must refer directly to the figure!

↳ Planning vs. Preparation: DIFFERENT!

↳ refer to sheet