

The Challenge of Natural Hazards



Tectonics


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Using this booklet

Welcome to the Internet Geography Work Booklet for the challenge of natural hazards. There are a range of resources on Internet Geography to support you studying this unit. Head over to <https://www.internetgeography.net/aqa-gcse-geography/the-challenge-of-natural-hazards/> to access them.

As well as the resources in this booklet, there are a number of online quizzes to check your learning as you work your way through this booklet.

 This icon lets you know when you should attempt the online quizzes developed to support your learning and check your knowledge. Your scores should be recorded on the tracking table at the back of this booklet. It is useful to revisit the quizzes to help your learning stick.

QR codes are included throughout the booklet to support you in researching the information you need to complete the activities. You will need to download a free QR code scanner to your mobile phone or tablet. Just go to your app store and search for “QR Code scanner” and download a free one.

After each section in this booklet there is a summary page for you to record the main points for each sub-topic. We recommend you use dual coding for this. Dual coding sounds a bit complicated, however, it's not. It simply involves combining text and images when you are studying. There are many ways you can present text and images, such as with infographics, timelines, cartoon strips, diagrams, and graphic organisers. We've pulled together a guide to help you do this with examples on Internet Geography. Either go to <https://www.internetgeography.net/dual-coding/> or scan the QR code below.



Introduction to natural hazards

There are a number of key words you need to know about natural hazards.

Complete the key terms list below by adding the correct definitions.

Natural hazard	
Hazard risk	
HIC	
LIC	
NEE	
Tectonic hazards	
Atmospheric hazards	
Earthquake	
Volcano	
Subduction zone	



Check your learning

Head over to www.internetgeography.net/wb60 and complete the key word quiz. Add your score for quiz 1 on the recording sheet.

Natural hazards



If humans did not live on Earth, would an earthquake be a natural hazard?
Explain your answer.

Examples of tectonic hazards

Examples of climatic hazards

Complete the table below to explain the factors that affect hazard risk.

Factors affecting hazard risk	Hazard risk is affected because...
Population increase	
Urbanisation	
Economic development	
Geographical location	
Increase in the frequency and magnitude of a natural hazard	



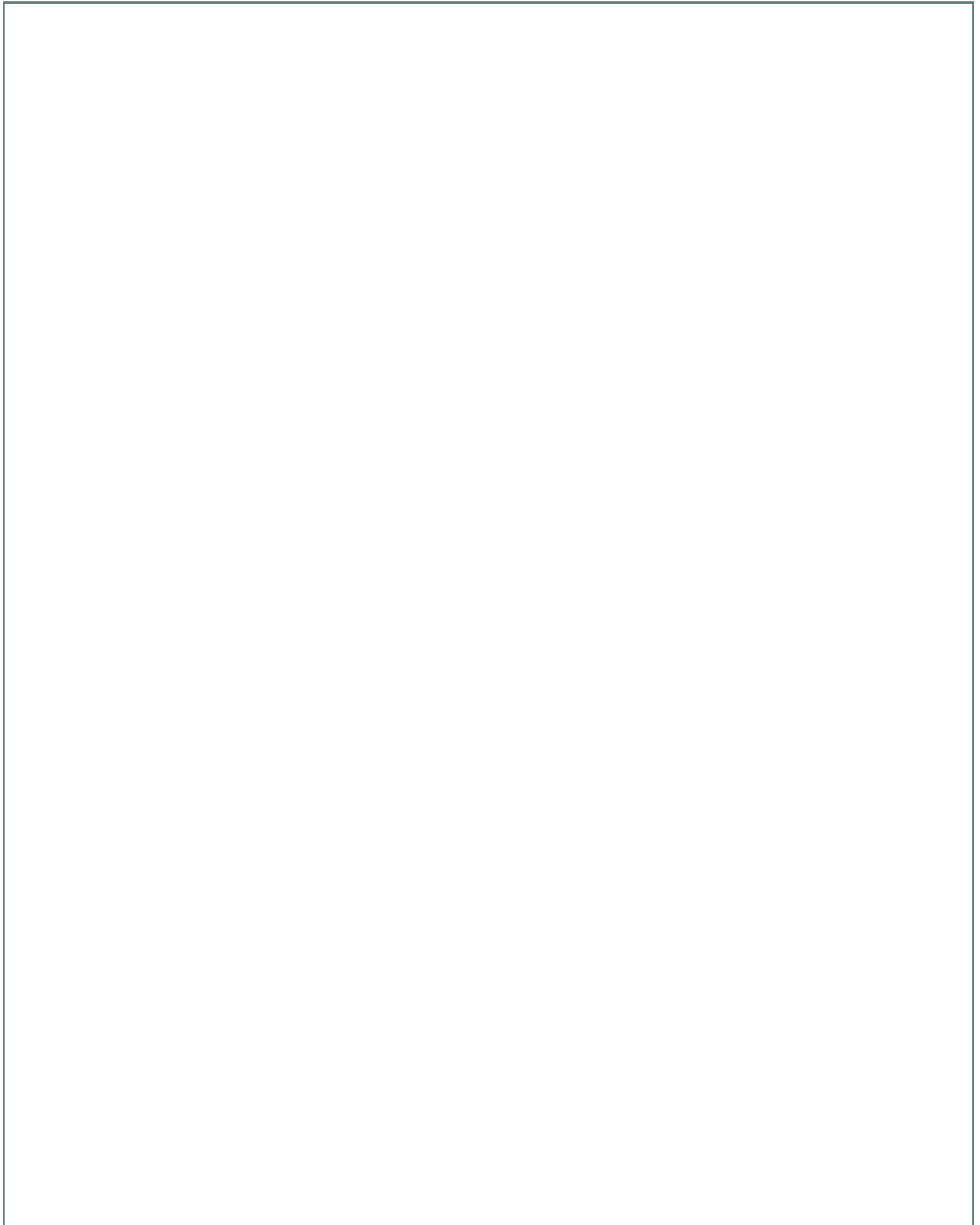
Check your learning

Head over to www.internetgeography.net/wb61 and complete the quiz. Add your score for quiz 2 on the recording sheet.

Dual coding

Use dual coding to summarise what you have studied in this section. Take a look at

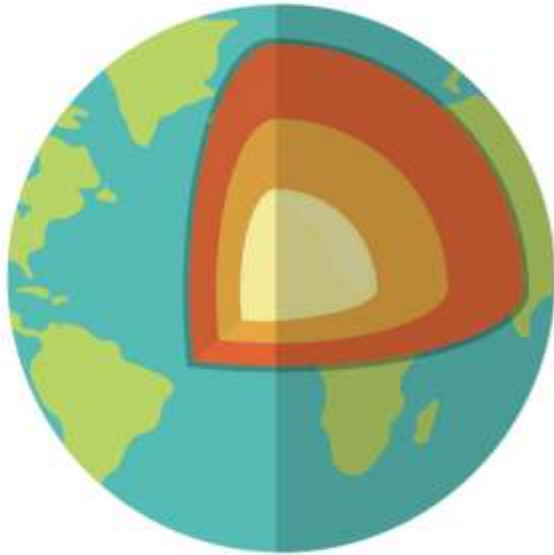
<https://www.internetgeography.net/dual-coding/>

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Earthquakes and Volcanoes



Annotate the diagram below to describe the structure of the Earth.



What is the lithosphere?

Complete the table below to compare the characteristics of oceanic and continental plates.

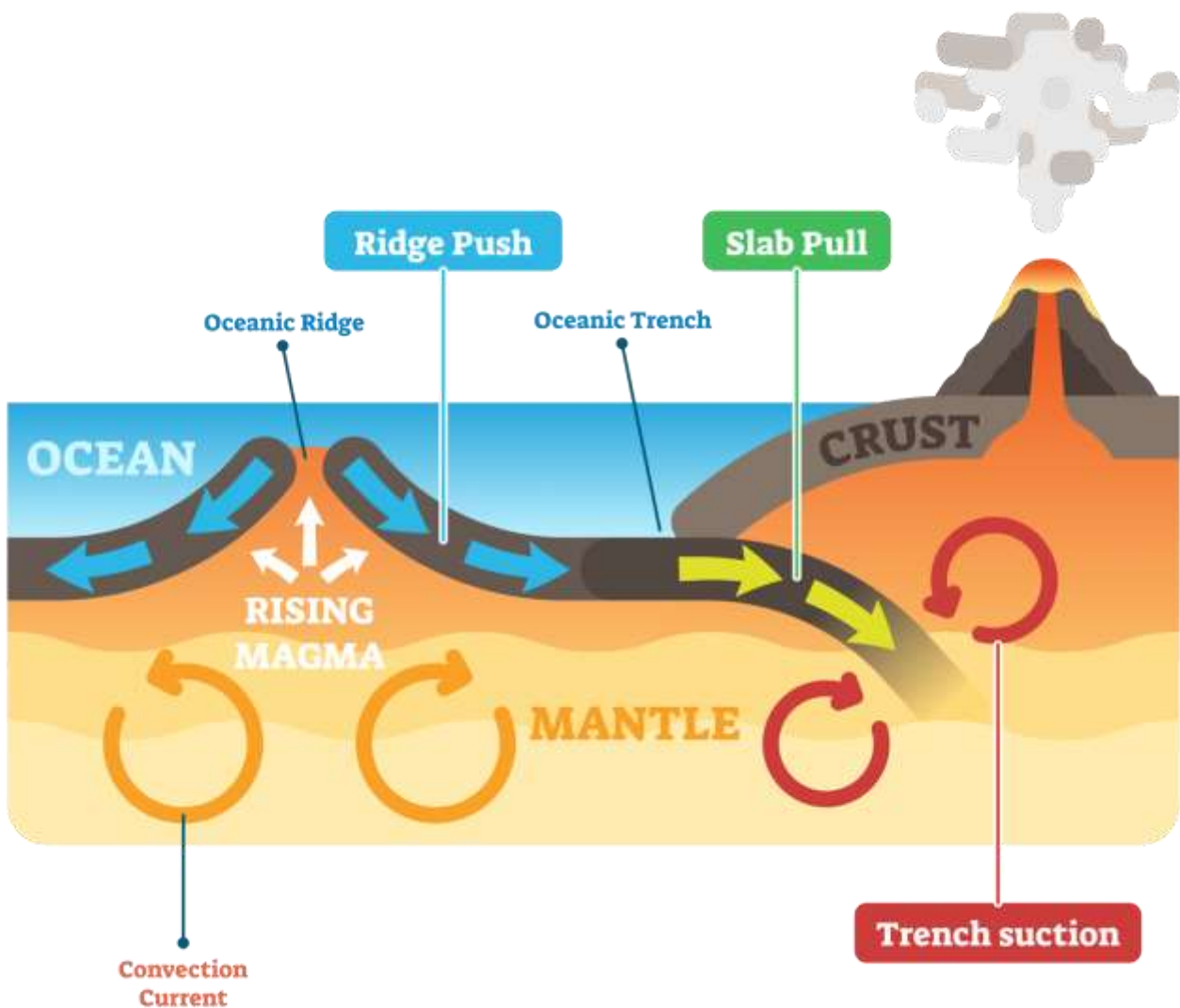
Characteristics	Oceanic Plate	Continental Plate
Density		
Thickness		
Geology		
Age		



Check your learning

Head over to www.internetgeography.net/wb62 and complete the quiz. Add your score for quiz 3 on the recording sheet.




Annotate the diagram to explain the causes of tectonic plate movement (convection currents, ridge push and slab pull).





Describe the global distribution of earthquakes and volcanoes.

Complete the table below to show the physical processes that occur at each plate margin.

Plate margin (sketch)	Direction of plate movement	Physical processes	Earthquakes	Volcanic eruptions
Constructive 				
Destructive 				
Conservative 				



Check your learning

Head over to www.internetgeography.net/wb63 and complete the quiz. Add your score for quiz 4 on the recording sheet.

<https://www.internetgeography.net/aqa-gcse-geography/the-challenge-of-natural-hazards/>

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Dual coding

Use dual coding to summarise what you have studied in this section. Take a look at

<https://www.internetgeography.net/dual-coding/>

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Tectonic hazards



What is the difference between a primary and secondary effects of an earthquake?

Identify the primary and secondary effects of an earthquake.

Primary effects of an earthquake	Secondary effects of an earthquake

Annotate the photograph below to show the primary and secondary effects of the earthquake (make sure you draw arrows that touch the exact point you are referring to in the image).



Identify the primary and secondary effects of a volcanic eruption.

Primary effects of an earthquake	Secondary effects of an earthquake

What is the difference between an immediate and long-term response to a tectonic hazard?



Give four examples of immediate responses to tectonic hazards.

Give four examples of long-term responses to tectonic hazards.




Check your learning

Head over to www.internetgeography.net/wb64 and complete the key word quiz. Add your score for quiz 5 on the recording sheet.

Dual coding

Use dual coding to summarise what you have studied in this section. Take a look at

<https://www.internetgeography.net/dual-coding/>

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Comparing Earthquakes



You need to study named examples of two tectonic hazards to show how the effects and responses vary depending on their contracting levels of wealth. If you study either the earthquake in Haiti or Nepal as your LIC example and either the Christchurch or L'Aquila as your example of an HIC there are quizzes to check learning.

Earthquake in a LIC/NEE:	Earthquake in a HIC:
Primary effects:	Primary effects:
Secondary effects:	Secondary effects:

Immediate response:	Immediate response:
Long-term response:	Long-term response:

Complete the table below using a ✓ to show the reasons for variations between the two earthquakes you have studied.

Reasons for variations	Causes differences in:		Influence by wealth
	Effects	Responses	
Building density			
Construction standards			
Corruption			
Hazard-prone area			
Magnitude or scale			
Monitoring/prediction			
Medical facilities			
Population density			
Resources/finance			
Secondary effects (e.g. tsunamis)			
Time of day/year			
Trained emergency services			
Transport infrastructure			
Type of plate margin			



Check your learning

Earthquake in an LIC (you only need to complete one of these)

Haiti: www.internetgeography.net/wb65

Nepal: www.internetgeography.net/wb66

Add your score to quiz 6.

Earthquake in an HIC (you only need to complete one of these)

L'Aquila: www.internetgeography.net/wb67

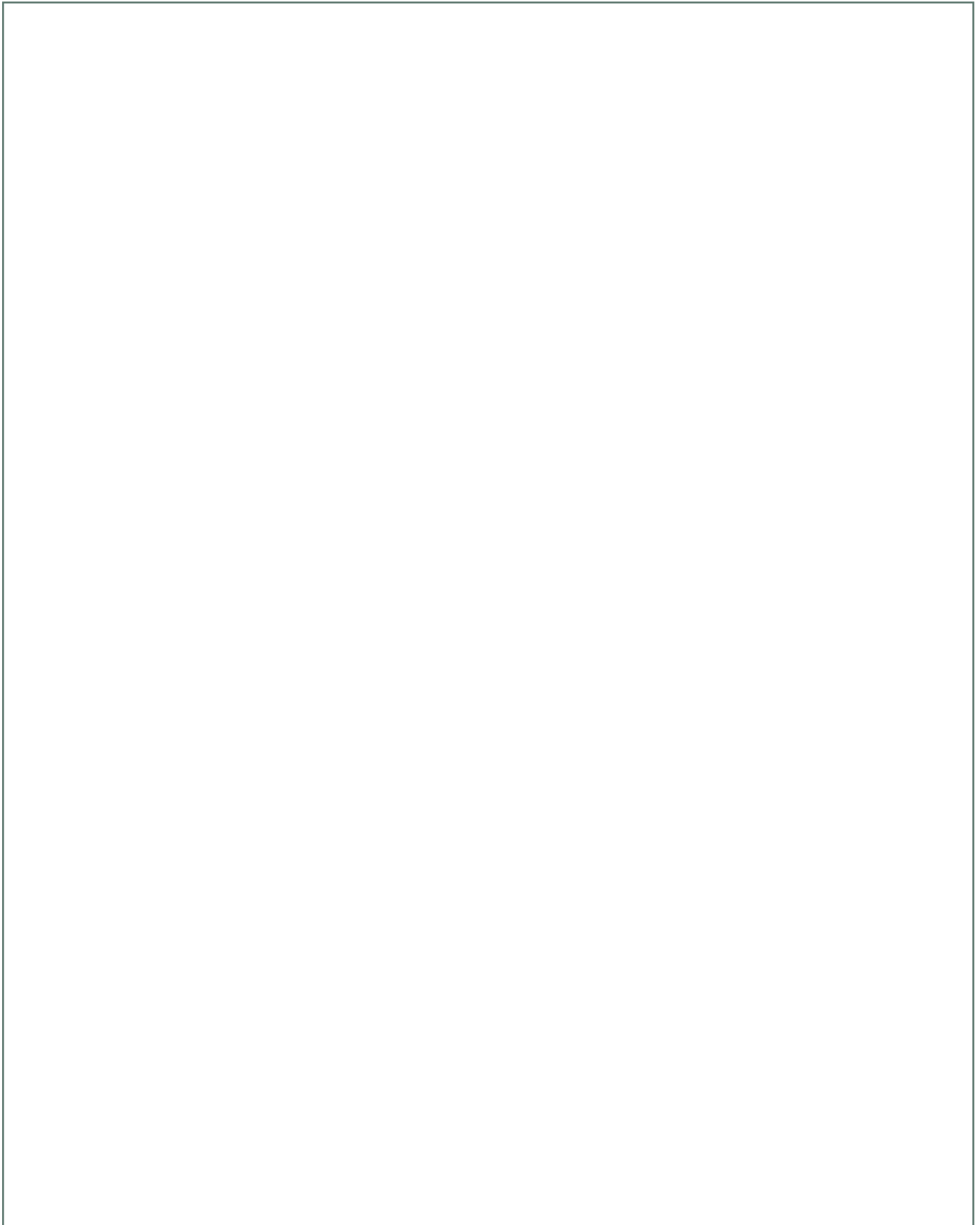
Christchurch: www.internetgeography.net/wb68

Add your score to quiz 7.

Dual coding

Use dual coding to summarise what you have studied in this section. Take a look at

<https://www.internetgeography.net/dual-coding/>

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Management of tectonic hazards



A considerable number of people live in tectonically active areas of the world. Complete the table below to identify economic and social reasons for this.

Economic reasons for living in risk in tectonically active locations	Social reasons for living at risk in tectonically active locations

Complete the spider diagram below to show how the risks from tectonic hazards can be reduced. Use a different coloured pen for earthquakes and volcanic eruptions.





Check your learning

Head over to www.internetgeography.net/wb69 and complete the key word quiz. Add your score for quiz 8 on the recording sheet.

Dual coding

Use dual coding to summarise what you have studied in this section. Take a look at

<https://www.internetgeography.net/dual-coding/>

Check your learning recording table

	Attempt 1	Attempt 2	Attempt 3
Quiz 1 www.internetgeography.net/wb60/	/10	/10	/10
Quiz 2 www.internetgeography.net/wb61/	/10	/10	/10
Quiz 3 www.internetgeography.net/wb62/	/10	/10	/10
Quiz 4 www.internetgeography.net/wb63/	/10	/10	/10
Quiz 5 www.internetgeography.net/wb64/	/10	/10	/10
Quiz 6 Earthquake in an LIC (you only need to complete one of these) Haiti: www.internetgeography.net/wb65 Nepal: www.internetgeography.net/wb66			
Quiz 7 Earthquake in an HIC (you only need to complete one of these) L'Aquila: www.internetgeography.net/wb67 Christchurch: www.internetgeography.net/wb68			
Quiz 8 www.internetgeography.net/wb69/	/15	/15	/15