GCSE

Case study knowledge

Geography case studies and examples

ACTIVITY PACK

- Knowledge organisers for all core and optional case studies
- Summary activities to help with revision
- Exam-style questions with mark schemes and indicative responses

Introduction

In the content of the different geography GCSE specifications, students are required to study case studies and examples to show they can apply their subject specific knowledge by referring to relevant locations.

This set of resources is designed to help develop your students' knowledge, understanding and application of case studies and examples they have learnt. It will help them demonstrate their knowledge of places, processes and environments at different scales.

Within this activity pack are all the core and optional physical and human geography case studies and examples required for the AQA GCSE programme of study, including:

Physical geography case studies and examples	Location
1. The effects and responses to tectonic hazards in countries of contrasting levels of wealth	Nepal and Chile earthquakes
2. A named example of a tropical storm, its effects and responses to it	Typhoon Haiyan, Philippines
3. An example of an extreme weather event in the UK, its causes, impacts and management	The Beast from the East, UK
4. An example of a small scale UK ecosystem	Avington Park lake, Winchester, UK
5. A case study of a tropical rainforest, causes and impacts of deforestation	Amazon, Brazil
6. A case study of a hot desert, its development opportunities and challenges	Sahara Desert, Africa
7. A case study of a cold environment, its development opportunities and challenges	Svalbard
8. An example of a section of coastline in the UK, its major landforms of erosion and deposition	Borth to Aberwstwyth, West Wales
9. An example of a coastal management scheme in the UK	Mappleton, England
10. An example of a river valley in the UK, its landforms of erosion and deposition	Afon Rheidol, West Wales
11. An example of a flood management scheme in the UK	Banbury, UK
12. An example of an upland area in the UK affected by glaciation, its landforms of erosion and deposition	Cadair Idris, Mid-Wales
13. An example of a glaciated upland area in the UK used for tourism used for tourism	Snowdonia, North Wales

Human geography case studies and examples	Location
1. A case study of a major city in an LIC or NEE	Mumbai, India
2. An example of how urban planning is improving the life for the urban poor	Rio de Janeiro, Brazil
3. A case study of a major city in the UK	Newcastle upon Tyne, UK
4. An example of an urban regeneration project, reasons it was needed and its features	Salford Quays, Manchester, UK
5. An example of how tourism in an LIC/NEE helps reduce the development gap	Jamaica
6. A case study of one LIC/NEE experiencing rapid economic development	Nigeria
7. An example of how modern industrial development can be more environmentally sustainable	Park Royal, west London
8. An example of a large scale agricultural development, its advantages and disadvantages	The Indus Basin, Asia
9. An example of a local scheme in a LIC or NEE to increase supplies of food	Cape Town, South Africa
10. An example of a large scale water transfer scheme, its advantages and disadvantages	South-North water transfer project, China
11. An example of a local scheme in an LIC or NEE to increase sustainable supplies of water	Bhatha Dhua, Pakistan
12. An example of fossil fuel extraction, its advantages and disadvantages	Fracking in the UK
13. An example of a local renewable and sustainable energy scheme in a LIC or NEE	Chambamontera, Peru

For each case study or example there are the following resources:

- knowledge organiser which can be used in numerous ways
- summary activity to help with revision
- exam-style questions with mark schemes and indicative responses.

The effects and responses to tectonic hazards in countries of contrasting levels of wealth

An earthquake in an LIC – Nepal

Development indicators

GDP: $29.04 billion
GDP per capita: $1 033
HDI: 0.579

Where is Nepal?

- It is located in central Asia, between India and China.
- The epicentre of the earthquake was in the Sindhupalchok district, 60 km north west of the capital city, Kathmandu.

Fig. 1: Location of Nepal

Cause of the earthquake in Nepal

- At 11.26am on 25 April 2015 a 7.8 magnitude earthquake was triggered as the Indian Plate collided with the Eurasian Plate.
- This is a destructive plate margin. It was the most powerful earthquake there for over 80 years.

Primary – Effects

- 8 632 people died.
- Over 23 000 people were injured.
- 1 million people were made homeless.
- 26 hospitals were destroyed.
- 50% of schools were destroyed.
- The Changu Narayan Temple and the Dharahara Tower were destroyed. These are UNESCO World Heritage sites.
- Over 500 000 buildings were destroyed or severely damaged.

Secondary – Effects

- An avalanche was triggered on Mount Everest which swept through the base camp. 19 people were killed, 12 were Sherpas and 7 were tourists.
- Landslides were triggered in the Langtang Valley. There was also another avalanche here in which 250 people were killed in the village of Ghodatabela.
- The landslide blocked the Kali Gandaki River which increased the flood risk.
- Harvests were reduced or lost in the following farming season.
- There was a short-term loss of tourist revenue.

Immediate – Responses

- India and China provided international aid. They committed themselves to over $1 billion to help support Nepal.
- The UK sent over 100 search and rescue specialists and medical experts alongside three RAF Chinook helicopters.
- The GIS tool 'Crisis Mapping' was used to help coordinate the response.
- The Red Cross sent aid workers and temporary housing was provided in Kathmandu.

Long term – Responses

- The government of Nepal is trying hard to reduce poverty so that residents can build structures which will withstand earthquakes.
- Earthquake drills are now carried out across Nepal.
- The Asian Development Bank provided up to $200 million for rehabilitation.

An earthquake in an HIC – Chile

Cause of the earthquake in Chile

- At 19.54pm on 16 September 2015 an 8.3 magnitude earthquake occurred 46 km away from Illapel.
- The earthquake occurred on a fault line along the boundary of the Nazca and South American Plate – this is a subduction zone.

Fig. 2: Location of Chile

Development indicators

GDP: $298.2 billion
GDP per capita: $15 923
HDI: 0.847

Where is Chile?

- Chile is located in the south west of South America. It is a coastal and mountainous country.
- The epicentre of the earthquake was 46 km offshore from Illapel at a depth of 22.4 km. It lasted 120 seconds.

Primary – Effects

- Illapel immediately reported that people were without electricity and drinking water.
- 90 000 were left without electricity.
- 1 800 people were left without water.
- Over 600 people were left homeless as 60 houses had been destroyed and 200 damaged.
- Tall buildings swayed in Buenos Aires, which is 690 miles away from Illapel.
- 15 people died.
- 6 people were reported missing.

Secondary – Effects

- The earthquake triggered a tsunami. Waves of 4.5 metres were observed along the cost of Coquimbo.
- Flooding was reported in Coquimbo, Tongoy and Concon. Large fishing vessels were swept into the streets of Coquimbo.
- The La Serena lighthouse was also damaged.

Why was Chile more prepared in 2015?

- Following the 2010 earthquake the Chilean government were criticised for their response. Millions of dollars were invested in warning systems such as tsunami sirens, mobile phone messaging and building codes. All new buildings must be able to survive a 9.0 earthquake.
- Earthquake drills are practiced and the authorities carry out rescue simulations regularly.

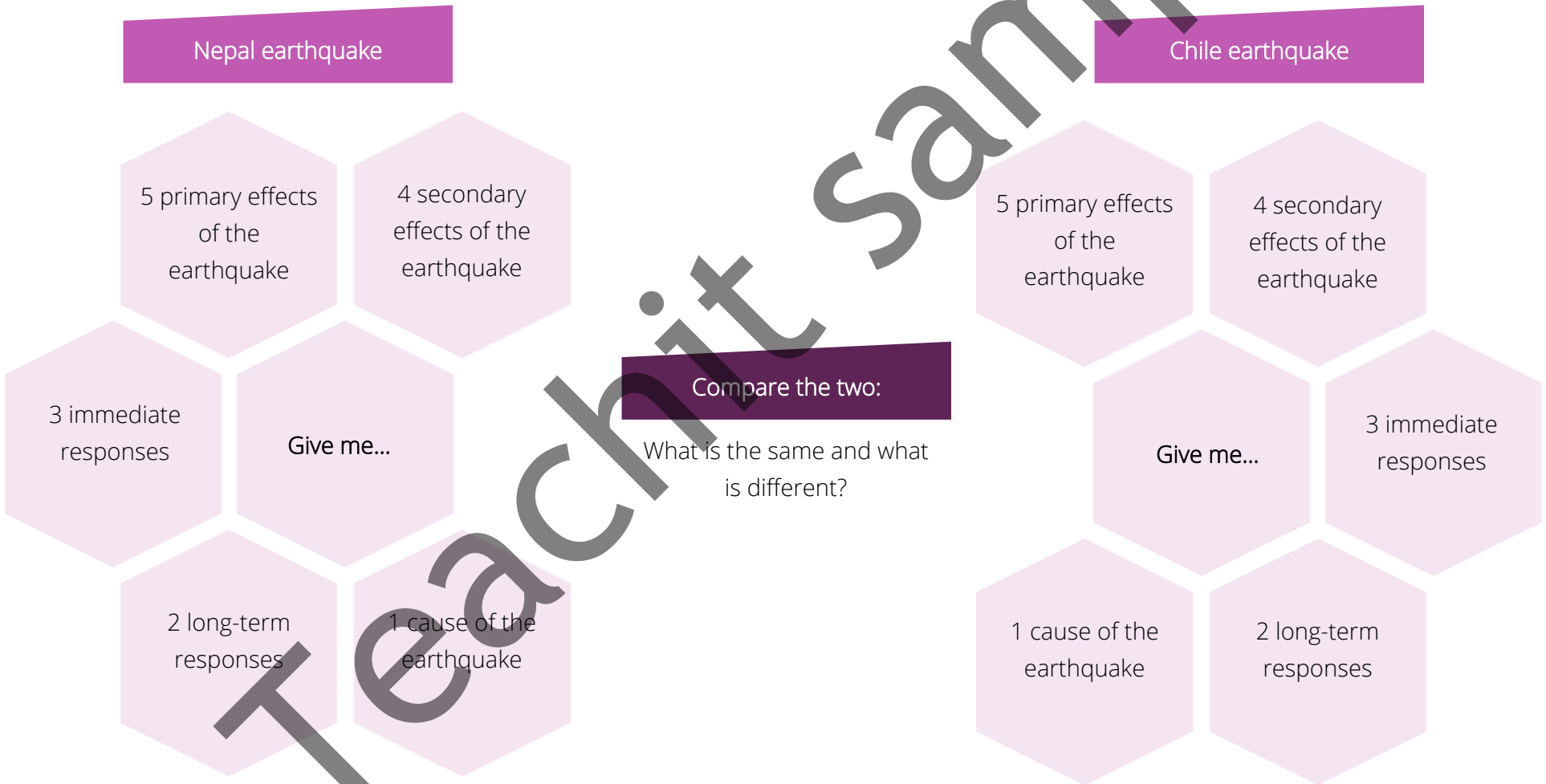
Responses to the earthquake

- The Chilean army was deployed to Coquimbo following the tsunami. A state of emergency was declared in the Coquimbo region, which was put under the control of General Schafik Nazal.
- The coastal areas of Chile were evacuated due to the tsunami risk. Many residents were sent a text message telling them to evacuate. The evacuation order affected one million people. The tsunami warning system had been improved after the 2010 earthquake.
- Chile's Independence Day festivities were cancelled.
- The Disaster Relief Emergency Fund provided humanitarian aid to 450 families.

Student summary task

Summarise, using this 'Give me 5' diagram, the information about the effects and responses to tectonic hazards in countries of contrasting levels of development. Add as much knowledge as you can without looking at your case study knowledge organiser.

In a different colour, fill in any gaps that you have by referring back to the knowledge organiser. Use this to help you with your revision.



Example exam-style questions

Remember to BUG the question:

Box the command word

Underline the key information

Go over the question again

These questions are relevant to tectonic hazards. Use the mark schemes, knowledge organiser and advice to help you answer the questions.

Question 1:

Describe how the effects of an earthquake in an HIC can be different from the effects of an earthquake in an LIC/NEE. (6)

How would this question be marked?

Level/band 3: 5-6 marks

- Thorough knowledge and understanding of how the effects of an earthquake can differ between an LIC/NEE and an HIC.
- Detailed descriptions of the effects and the differences.
- Excellent use of key terms.

Level/band 2: 3-4 marks

- Sound application of knowledge and understanding of how the effects of an earthquake can differ between an LIC/NEE and an HIC.
- Clear descriptions of the effects and differences.

Level/band 1: 1-2 marks

- Basic points have been made about the effects but not necessarily how they are different.
- Basic descriptions.

Key ideas that an examiner would look for:

- Clear understanding of the differences between the effects of an earthquake in an LIC/NEE to an HIC, e.g. level of damage, deaths, injuries, destruction of buildings, etc.
- At least three differences should be described – however, you could also consider an LIC/NEE that is prepared and therefore suffers fewer effects.

Remember for a 6-mark question you should aim to describe at least three points. You are not explaining your points – just 'painting a picture with words'.

Each point should be a separate paragraph.

Use the key terminology that you learnt when studying tectonics, e.g. primary effects, secondary effects, irreparable damage, etc.

Question 2:

Describe the immediate responses to a tectonic hazard in an LIC. (4)

How would this question be marked?

1 mark for each immediate response (a maximum of 4 marks)

Key ideas that an examiner would look for:

- Examples of immediate aid, e.g. international aid, search and rescue, temporary housing, food supplies, etc.
- Two to four examples of immediate responses. You could include examples from case studies that you have learnt.

Or Two detailed descriptions of immediate responses.	Remember when you are describing you are painting a picture with words. Each point should be a new paragraph.

Question 3:

Using examples of a tectonic hazard event, evaluate to what extent primary effects are more significant than secondary effects. (9)

How would this question be marked?

Level/band 4: 7-9 marks

- Exceptional knowledge and understanding of primary and secondary effects of tectonic hazards and their significance.
- Comprehensive chains of reasoning which provide a sophisticated evaluation of the effects.
- Answer should be balanced and discuss both primary and secondary effects in detail.
- Wider geographical understanding (use other case study knowledge) to justify your decision.

Level/band 3: 5-6 marks

- Thorough application of knowledge and understanding of primary and secondary effects of tectonic hazards and their significance.
- Chains of reasoning provide a detailed evaluation of the effects.
- Answer is balanced, with both primary and secondary effects discussed.
- Wider geographical understanding is used to support the decision.

Level/band 2: 3-4 marks

- Sound application of knowledge and understanding of primary and secondary effects of tectonic hazards and their significance.
- Answer is limited and may focus on just primary or secondary effects rather than the

Key ideas that an examiner would look for:

- A good understanding of the primary and secondary effects of a tectonic hazard event, e.g. tsunami, earthquake, volcanic eruption.
- Case study knowledge of one or more tectonic hazards, not just a generic knowledge.
- Detailed evaluation of the effects: Primary: death, destruction, injuries, fires. Secondary: avalanches, landslides, disease, looting, aftershocks, etc. The evaluation must consider which are more significant (cause more problems/are worse).
- A balanced answer discussing both primary and secondary effects. It could also discuss examples where each are more significant in their location and the reasons why, e.g. level of development, location, accessibility, etc.
- A justified conclusion evaluating whether primary effects are more significant and why, backed up with evidence.
- Further case study knowledge dotted throughout. This could be as a comparison or details to back up your points.
- You can use more than one type of tectonic hazard.

Remember to structure your answer:

Introduction: What tectonic hazards will you be discussing and what are primary and secondary effects?

significance likely to describe or explain the effects rather than evaluate.

- Some wider geographical knowledge is used.

Level/band 1: 1-2 marks

- Some basic application of knowledge and understanding of primary and secondary effects of tectonic hazards and their significance.
- Basic answer which describes the effects.
- Limited wider geographical knowledge and understanding.

Paragraph 1: Discussion of the primary effects, using case study knowledge; have they been more significant in locations you have studied?

Paragraph 2: Discussion of the secondary effects using case study knowledge; have they been less significant in locations you have studied?

Paragraph 3: A comparison of primary and secondary effects. You could include examples of where secondary effects have been more significant, including wider knowledge and understanding.

Conclusion: A justified ending. Link back to the question are primary effects more significant than secondary effects?