

WJEC Geography
Unit 1 - Changing Human and
Physical Landscapes

Walking Talking Mock

Time: 1 hour 30 minutes

Total marks: 83

Section A

THEME 1: Landscapes and physical processes

THEME 2: Rural-urban links

Section B Options

THEME 3: Tectonic landscapes and hazards

OR

**THEME 4: Coastal hazards and their
management**

THEME 1: Landscapes and physical processes

1. (i) Complete the following sentences using **three** terms from the box below. (3)

..... is the ability of a landscape or ecosystem to absorb the activity of people without any lasting damage.

..... is a landscape that is hilly or mountainous.

..... is a place of special interest that attracts many tourists and is often congested at peak times.

Carrying capacity
Place
upland
lowland
landscape
Honeypot site

Tips

- Only use the words from the box
- Circle the words you think are correct before you write them in

(i) Complete the following sentences using **three** terms from the box below. (3)

Carrying capacity is the ability of a landscape or ecosystem to absorb the activity of people without any lasting damage.

Upland is a landscape that is hilly or mountainous.

Honeypot site is a place of special interest that attracts many tourists and is often congested at peak times.

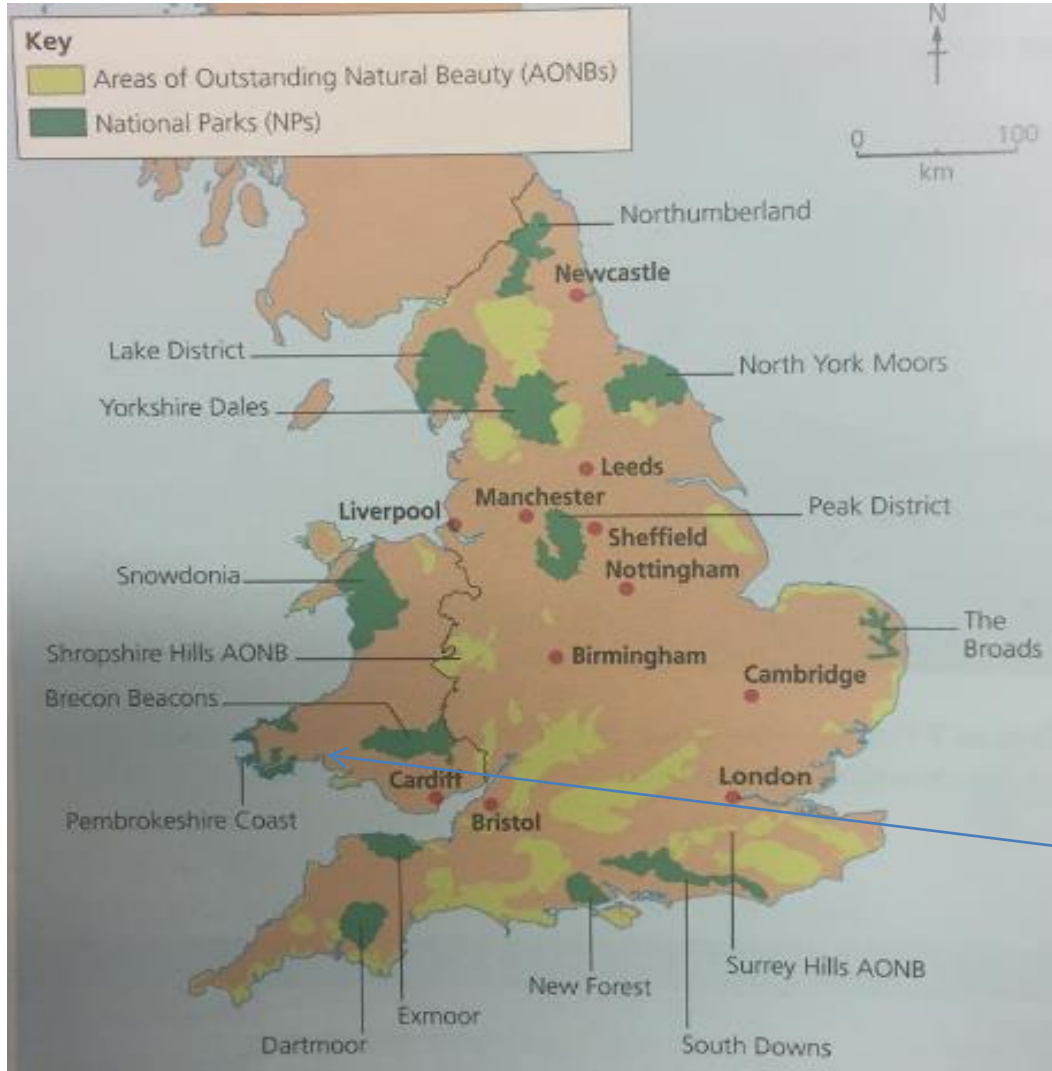
You won't need these words!

place
lowland
landscape

Remember this answer, you'll need it later



Study



Your task – group

Think, pair, share

What does the map show?

What does the key show?

Why are the cities labelled?

What pattern does it show?

Study = look at the map, pick out any patterns. You'll need to have done this to answer an upcoming question

Pembrokeshire National Park is here. The next “explain” question is about this place.

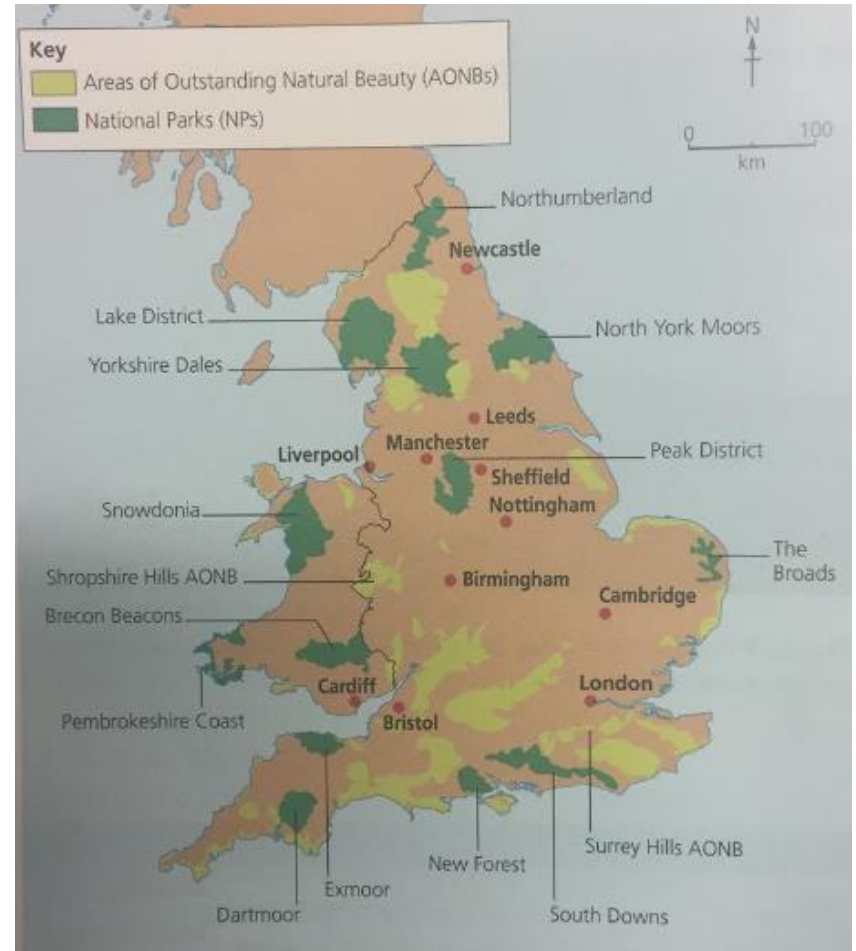
(ii) **Describe** the distribution of National Parks across the UK, as shown in **Figure 1.1**. (2)

Important prompt words

Describe - using figure 1.1 = only use figure 1.1

Distribution - where are the national parks?

- The majority in England (1)
- Three in Wales (1)
- Many in the north of England (1)
- Along the south coast and south east of England (1)
- None in Northern Ireland (1)



Explain

(iii) Pembrokeshire National Park is in south west Wales. Use **Figure 1.1** to explain **ONE** reason why Pembrokeshire National Park is a honeypot site. (2)

Important prompt words

Honeypot - this was part of question 1

ONE - just explain one reason

Pembrokeshire National Park – it is on the map. Take some clues from the map

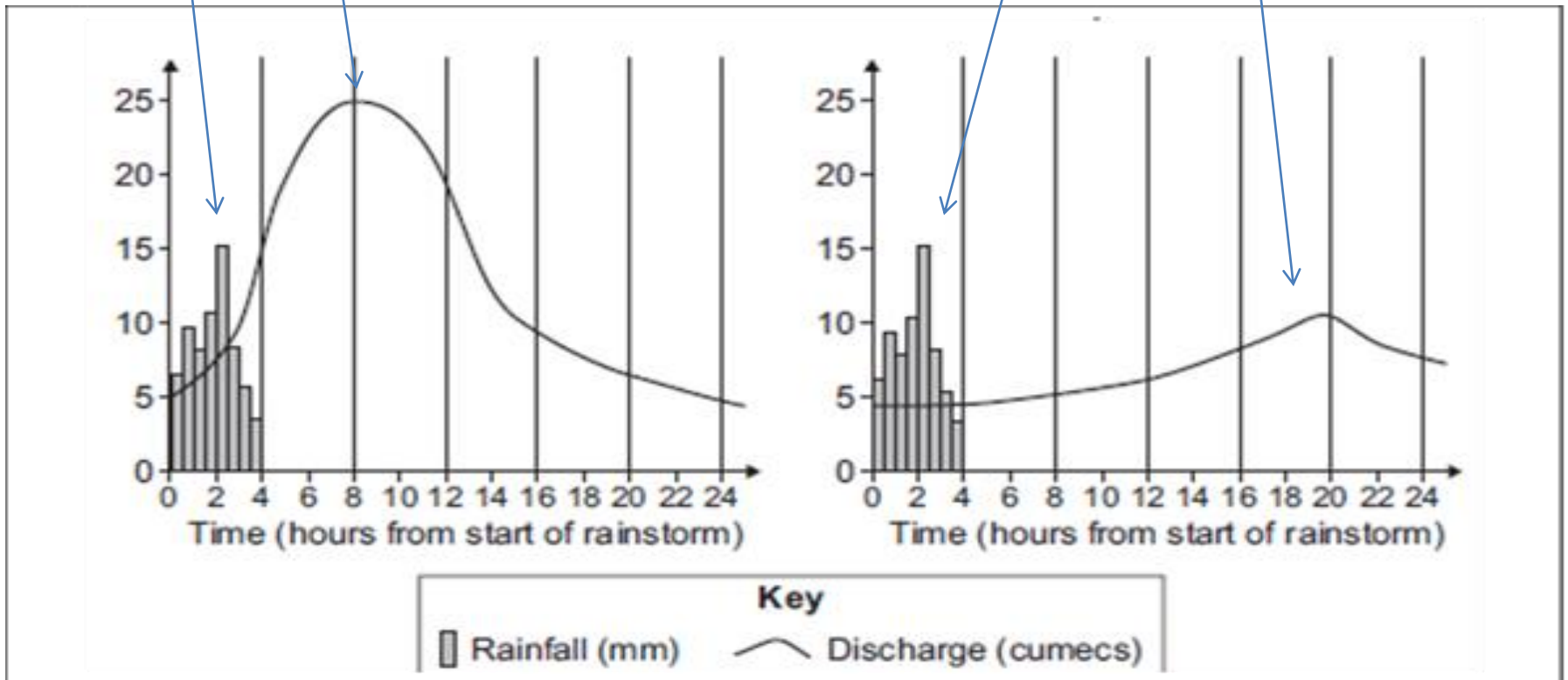
You need to use Figure 1.1

- ✓ Beaches/sea/coastline
- ✓ Figure 1.1 shows **Pembrokeshire National Park** is close to the coastline
- ✓ Tourists might want to visit the beach/sea/coastline
- ✓ Countryside
- ✓ Figure 1.1 shows how rural Pembrokeshire National Park is Tourists might want the peace, tranquillity, quiet or access open space

(b) Study the hydrographs below.

Lag time 6 hours – the time between peak rainfall and peak discharge

Lag time 18 hours – the time between peak rainfall and peak discharge



Explain the reasons for the differing lag times between the two hydrographs show in **Figure 1.2.** (4)

You'll get 1 mark per reason but you must explain.

Tip – use connectives use as so, therefore and because

Explain (4)

A may have been deforested/deforestation(1) **Therefore** no trees /less trees to intercept the water (1) **So** there is a large amount of surface/ground water getting to the river quicker (1)

The drainage basin may be urbanised/built up/ or impermeable rock (1) **therefore** water can't infiltrate the ground (1) stays on the surface and gets to the river quicker (1)

B may have large amounts of trees/afforestation (1) **therefore** a lot of precipitation is intercepted by the leaves (1) **so** the water gets to the river slower (1)

The drainage basin B may be farmland/ or permeable rock (1) **therefore** water can infiltrate the ground (1) getting to the river slower (1)

Suggest

(ii) Suggest **one** way drainage basin A could be managed to prevent future flooding. (2)

Planting trees/afforestation (1)
soft engineering (1)
allows more interception (1)
increasing the lag time (1)
Hard engineering controlling the flow of the river (1)

Credit other valid answers but only credit **one**

You must expand on the **one** suggestion

(c) Study the OS map extract in **Map 1.3** below. It shows part of the coastline of the Gower Peninsula in south west Wales.

Study

Oxwich Bay



Feedback

2500 feet 1 km

Image courtesy of Ordnance Survey

Underline the correct name of the erosional landform shown in box A on **Map 1.3 (1)**

Wave cut notch and wave cut platform

Headland and bay

Cave, arch, stack, stump

Tip
The map gave you this answer!
Oxwich Bay



Identify (2)

(ii) Identify **two** different land uses in box A on **Map 1.3** (2)

Only places on the map that are in the red box

Only using Map 1.3

- roads (1)
- schools (1)
- works/factory (1)
- hospital (1)
- houses (1)
- parking (1)
- tourism (1)
- farming (1)
- settlement (1)

(iii) Suggest
one reason
why rates of
erosion vary
in **Box A** (2)

Suggest

Geology/rock type (1)
resistant rock erodes slower
than less resistant rock (1)

Credit other valid responses.

You will not get credit for two
unelaborated statements



(iv) Explain the formation of the landform (headland and bay) that you have identified on **Map 1.3** (4)

Tip – use connectives use as so, therefore and because

Different rock types/geology run at right angles to the coastline (1)
Resistant/hard rock is followed by less resistant rock (1) **so** less resistant rock is more easily eroded (1) **because** of hydraulic action, the waves pushing air into the cracks and **therefore** weakening the cliff (1) **because** of abrasion, material in the waves being thrown at the cliff chipping it away (1) **therefore** this less resistant rock is eroded to form a bay (1) leaving behind a headland out to sea (1)

(d) Study **Figure 1.4** Study then explain (6)
of Borth,
west
Wales.

List anything
you can see on
this map.
Read the next
question, it is
about human
activity.



(i) With reference to **Figure 1.4**, explain how human activity affects the coastline at Borth. (6)

Key requirements
of the question...

- ✓ With reference to **Figure 1.4** (use the pictures)
- ✓ Show you understand human activity can affect the coast line

What are these?



With reference to **Figure 1.4**, explain how human activity affects the coastline at Borth.

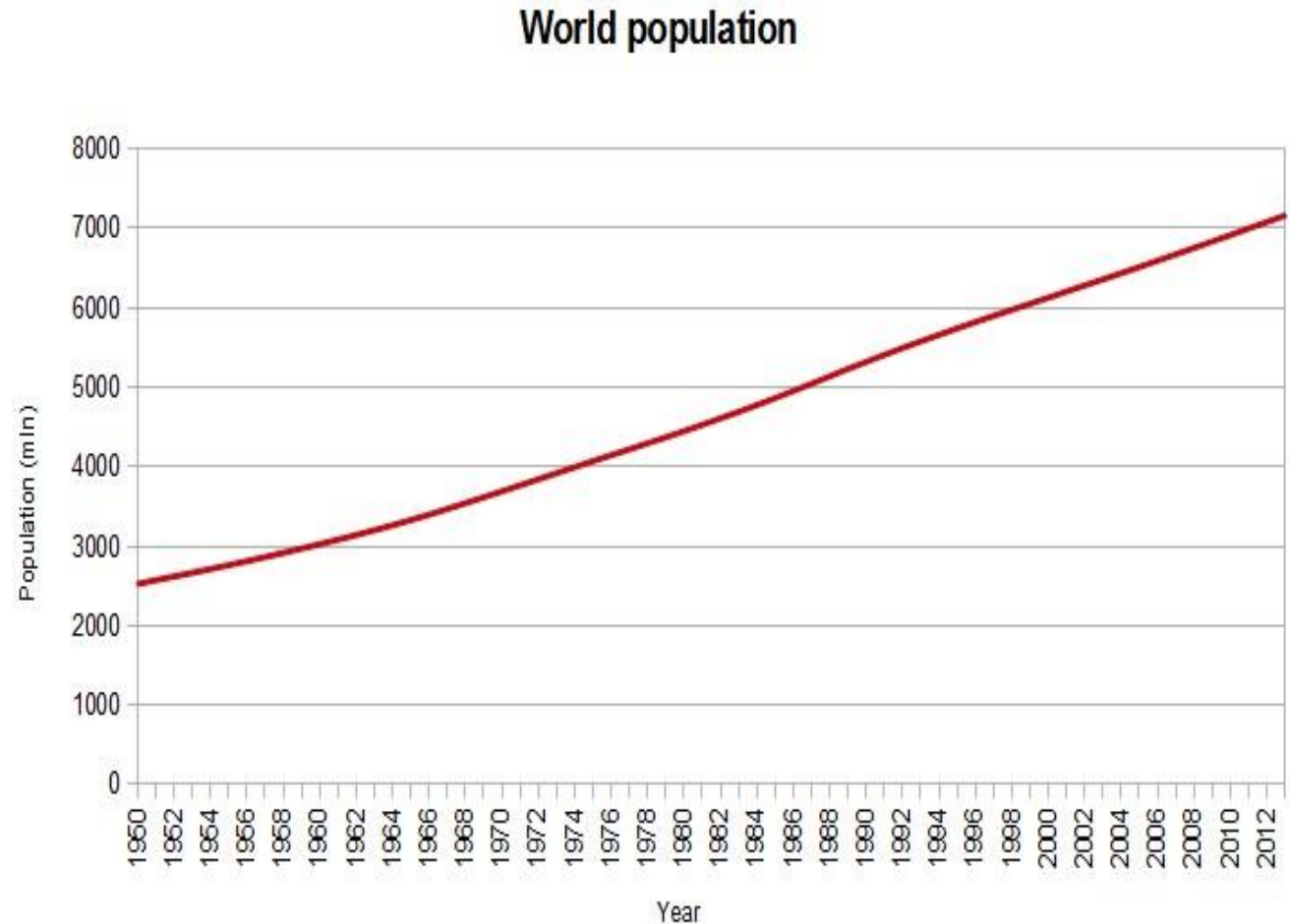
Explain (6)

Type of answer	Mark	Description
Perfect	5-6	Explains human activity and the effects on the coastline of Borth. The chosen effects are explained in specific detail and are fully justified. Meaning is clear and answer is organised well. Coastal management such as groynes should be explained.
Good	3-4	Applies understanding of the human activities shown in the resource to how they affect the coastline. The effects are justified with simple reasons. Meaning is generally clear. The response is structured.
Basic	1-2	Simple statements show basic understanding. The answer is based on the resource only with limited explanation.
Wrong	0	Award 0 marks if the answer is incorrect and does not explain coastal management.

THEME 2: Rural-urban links

(a) Study **Figure 2.1** below.

Use it to answer the following questions



All these answers are on the graph in **Figure 2.1**

(i) What was the global population in 2010? (1)

✓ 6.8-6.9 billion

(i) Describe how the global population has changed since 1950 (2)

✓ Increased (1)

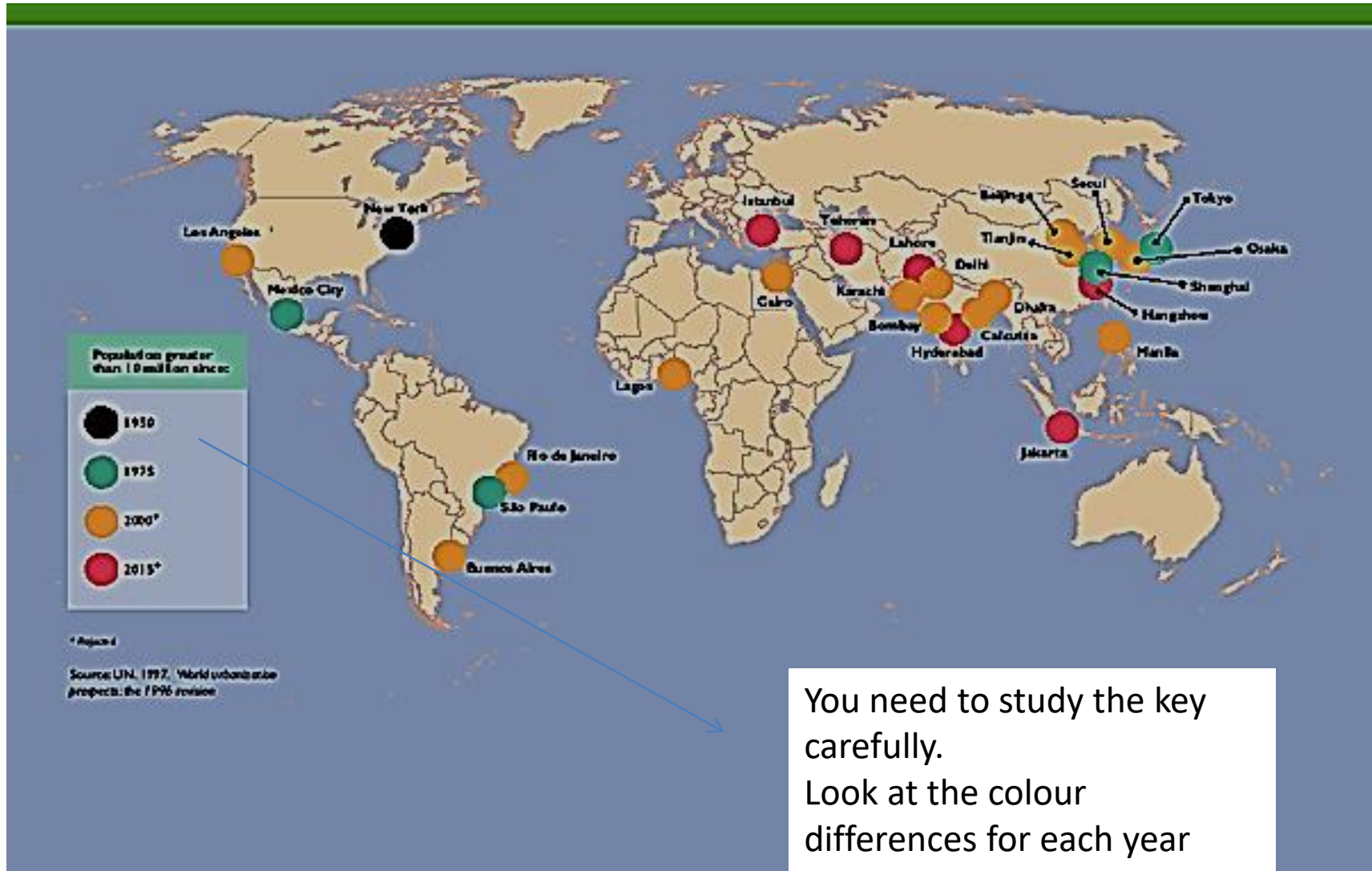
✓ Slow initially (1)

✓ Fastest growth in the past 30 years (1)

✓ Giving numbers taken from the graph (1)

✓ One mark for each. Only need to give two.

(b) Study the map below



You need to study the key carefully.
Look at the colour differences for each year

Describe

Describe the location of the world's largest cities in 1975 and 2015 (3)

Only use the map!

Marks given for up to three

1975

Most to the north of the equator (1)

None in Oceania/Africa (1)

3 in Europe (1)

Half in North and South America (1)

Many are in coastal locations (1)

2015

Clustered in Asia (1)

Most to the north of the equator (1)

None in Oceania (1)

Only one in Africa/South America (1)

Many are in coastal locations (1)

Compare

(ii) **Compare**
the distribution
of the world's
largest cities in
1975 and
2015? (2)

More cities in Asia in 2015 (1)
Less cities in Europe (1)
Less cities in North/South America (1)
Less cities from HIC's (1)
More cities from NIC's (1)

Compare =
what changed?

List

(c) (i) List **4 pull factors** that attract people to rural areas on the edge of large cities in **HIC's**. (4)

Only list positive pull factors for High Income Countries like the UK



Just list 4 reasons to live in rural areas on the edge of cities

- Less congestion (1)
- Less crime/safer (1)
- More peaceful /quieter(1)
- Cheaper land (1)
- More space (1)
- Larger home /garden(1)
- Easier to work from home/commute (1)

Define

(c) (ii) Give a definition of a brownfield site. (1)

Older/disused/derelect/run-down industrial area (1)

Study the photo below. It shows the **regeneration** of Salford Quays.



Explain (6)

(c) (iii) Explain the advantages and disadvantages of the regeneration of a brownfield site you have studied.

Does this place remind you of a place you have studied? Could be Cardiff Bay? Swansea?

This is an example of a place called Salford Quays that has been regenerated. This is also a way to get you to think about your chosen place. Don't start the question until you have spent at least 2 minutes studying this image.



Think, pair, share

What advantages and disadvantages could you explain?

Advantages

- ✓ Jobs in construction
- ✓ Permanent jobs in the leisure industry
- ✓ Increase in leisure facilities
- ✓ Increase in tourism
- ✓ New housing available (normally flats)
- ✓ Or any other relevant

Disadvantages

- ✓ Conflict between old and new residents
- ✓ Anti-social behaviour
- ✓ Environmental concerns
- ✓ Cost of construction
- ✓ Cost of new homes
- ✓ Or any other relevant

iii) Explain the advantages and disadvantages of the regeneration of a brownfield site you have studied.

Type of answer	Mark	Description
Perfect	5-6	First sentence names the case study. Has identified that the photograph was of a brownfield site that has been regenerated. A variety of advantages and disadvantages of the regeneration of brownfield sites are fully explained. Detailed reference to a named case study.
Good	3-4	First sentence names the case study. Identifies advantages and disadvantages of regeneration of brownfield sites. Refers to Salford Quays and names another named area. Clear answer. The response has purpose, is organised and well structured.
Basic	1-2	Simple statements show basic understanding. The answer is based on the resource only. Meaning may lack clarity in parts. Statements are linked by a basic structure.
Wrong	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

(d) (i) What does sphere of influence mean? Tick (✓) the correct definition below. (1)

Definition	Tick (✓)
The distance that people are willing to travel to visit a place	✓
The amount of people who live in an area	
The area of land around a city that cannot be built on	

To what extent (8)

(d)(ii) **To what extent** could the increasing use of the internet be a concern for traditional retail outlets in towns and cities?

The accuracy of your writing will be assessed in your answer to this question. (3)

Important prompt words –

Internet shopping

Retail

Towns and cities

Traditional

Group task: Think, pair, share

What is this question asking you about?

What impact is internet shopping having

on towns and cities?

Your answer may expand on...

- ✓ Shops may close down due to increased competition
- ✓ Jobs may be lost if shops close down
- ✓ Certain towns and cities could go into a spiral of decline
- ✓ Internet shopping will have less of an impact of big CBD's and regional centres
- ✓ Towns and cities may need to be improved to combat the risk posed by internet shopping
- ✓ Towns and cities may replace shops with entertainment facilities (pubs, restaurants, cinema etc.)
- ✓ Shift of focus away from retail and towards entertainment

Type of answer	Mark	Description
Perfect	7-8	Your answer shows understanding that internet shopping has an impact on retail outlets in towns and cities because of increased competition. You name examples of areas of Wales or other parts of the UK. The response has clear purpose, is fluent and logically structured.
Good	5-6	Understanding of the impact that internet shopping can have on retail outlets in towns and cities. Refers to specific towns and cities. Meaning is clear. The response has purpose, is organised and well structured.
Okay	3-4	Some understanding of the impact that internet shopping can have towns and cities. The meaning is generally clear. The response is structured.
Basic	1-2	Simple statements that show basic understanding of the impacts of internet shopping. Meaning may lack clarity in parts. Statements are linked by a basic structure.
Wrong	0	Irrelevant answer that does not link internet shopping and towns and cities.

Band	Marks	Performance descriptions for writing accurately
<i>High</i>	3	<ul style="list-style-type: none"> • Learners spell and punctuate with consistent accuracy • Learners use rules of grammar with effective control of meaning overall • Learners use a wide range of specialist terms as appropriate
<i>Intermediate</i>	2	<ul style="list-style-type: none"> • Learners spell and punctuate with considerable accuracy • Learners use rules of grammar with general control of meaning overall • Learners use a good range of specialist terms as appropriate
<i>Threshold</i>	1	<ul style="list-style-type: none"> • Learners spell and punctuate with reasonable accuracy • Learners use rules of grammar with some control of meaning and any errors do not significantly hinder meaning overall • Learners use a limited range of specialist terms as appropriate
	0	<ul style="list-style-type: none"> • The learner writes nothing • The learner's response does not relate to the question • The learner's achievement in writing accurately does not reach the threshold performance level, for example errors in spelling, punctuation and grammar severely hinder meaning

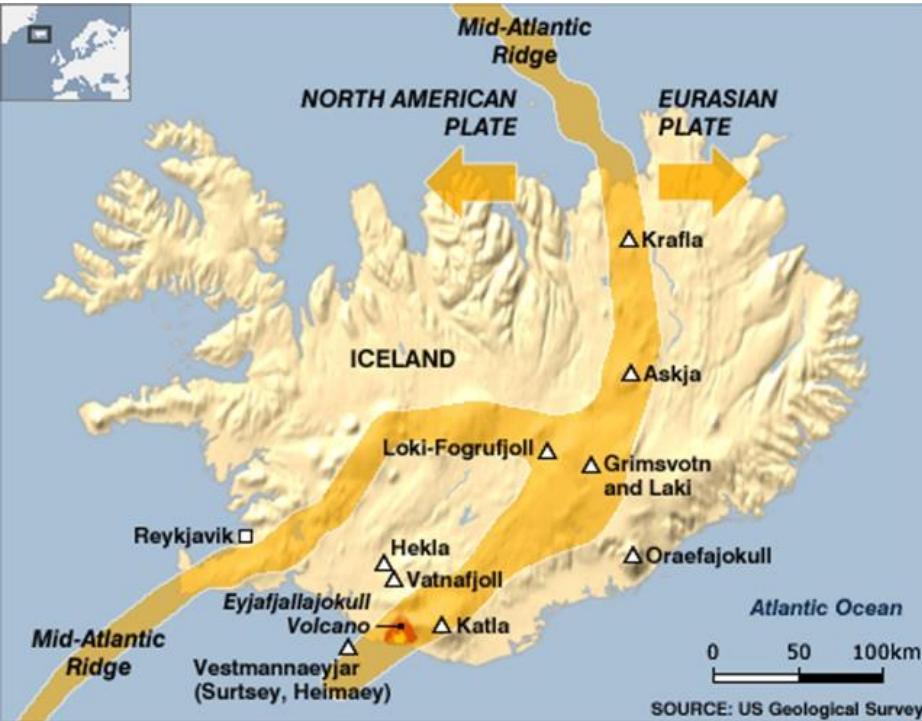
SECTION B: OPTIONS

Answer one question in this section, either Theme 3 or Theme 4.

Do not answer both as you won't have time!

THEME 3: Tectonic Landscapes and Hazards

Study – look at for 2 minutes



Map 3.1 The location of Eyjafjallajökull (an active volcano) on the island of Iceland

Use information from Map 3.1 to circle three correct answers in the paragraph below. (3)

Eyjafjallajökull is located in the north east / north west / south west of Iceland. The nearest settlement to Eyjafjallajökull is Reykjavik/ Selfoss/ Grindavik. Reykjavik is approximately 60 / 100 / 160 kilometres from the volcano.

Use information from Map 3.1 to circle three correct answers in the paragraph below. (3)

Eyjafjallajökull is located in the north east / north west / south west of Iceland. The nearest settlement to Eyjafjallajökull is Reykjavik/ Selfoss/ Grindavik. Reykjavik is approximately 60 / 100 / 160 kilometres from the volcano.

Outline

(ii) Outline
why people
continue to
live near to
active
volcanoes (4)

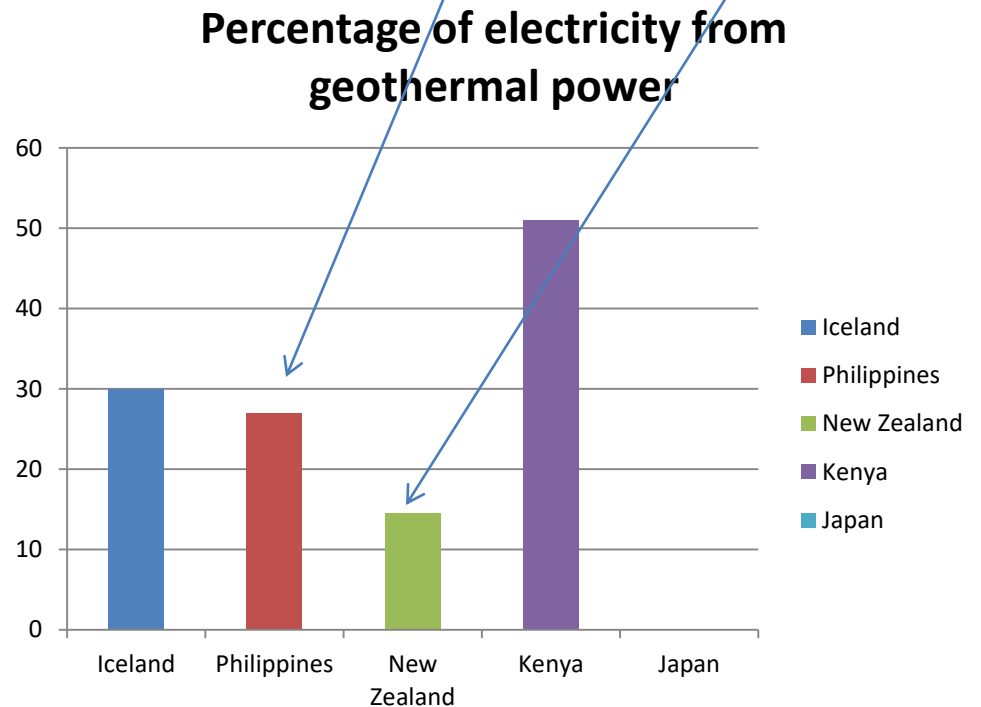
- ✓ Fertile soil (1)
- ✓ Tourism (1)
- ✓ Land is cheap (1)
- ✓ Family connections (1)
- ✓ No alternative/too poor to move/lack of choice (1)
- ✓ Minerals in ground (1)
- ✓ Volcanic rock can be used for building (1)
- ✓ Geothermal energy (1)

Study 3.2

Use the data from Table 3.2 to complete the bar graph below

Country	Percentage
Iceland	30%
Philippines	27%
New Zealand	14.5%
Kenya	51%
Japan	0.1%

Table 3.2 Percentage of electricity that comes from geothermal power



List

List 3
hazards
associated
with
volcanoes
(3)

List 3 hazards/dangers

- ✓ Pyroclastic flow (1)
- ✓ Ash cloud (1)
- ✓ Lava flow (1)
- ✓ Mud flow (1)
- ✓ Landslide (1)

Outline

(iii) Outline the **strategies** that can be used to reduce the risks that volcanoes create. (4)

Use one named example to help your answer

You should show knowledge of strategies (ways to reduce the risks) such as...

- ✓ Seismometers
- ✓ Tilt meters
- ✓ Gas measurements (sulphur)
- ✓ Microphones
- ✓ Early warning systems
- ✓ Evacuation plan
- ✓ Exclusion zones
- ✓ Diversion channels
- ✓ Spraying lava flows with water

To what extent (8)

(c) 'LIC's are more severely affected by tectonic events than HIC's.' To what extent do you agree with this statement?

Important prompt words –

LICS = Low income countries

Severe= how bad?

Tectonic events= Caused by volcanoes and earthquakes

HICs= High income countries

Do you agree?

Individual task: List the impacts volcanoes or earthquakes can have ...

Socially
Economic
Environmentally

You need to name at least one LIC event and one HIC even to access top mark band.

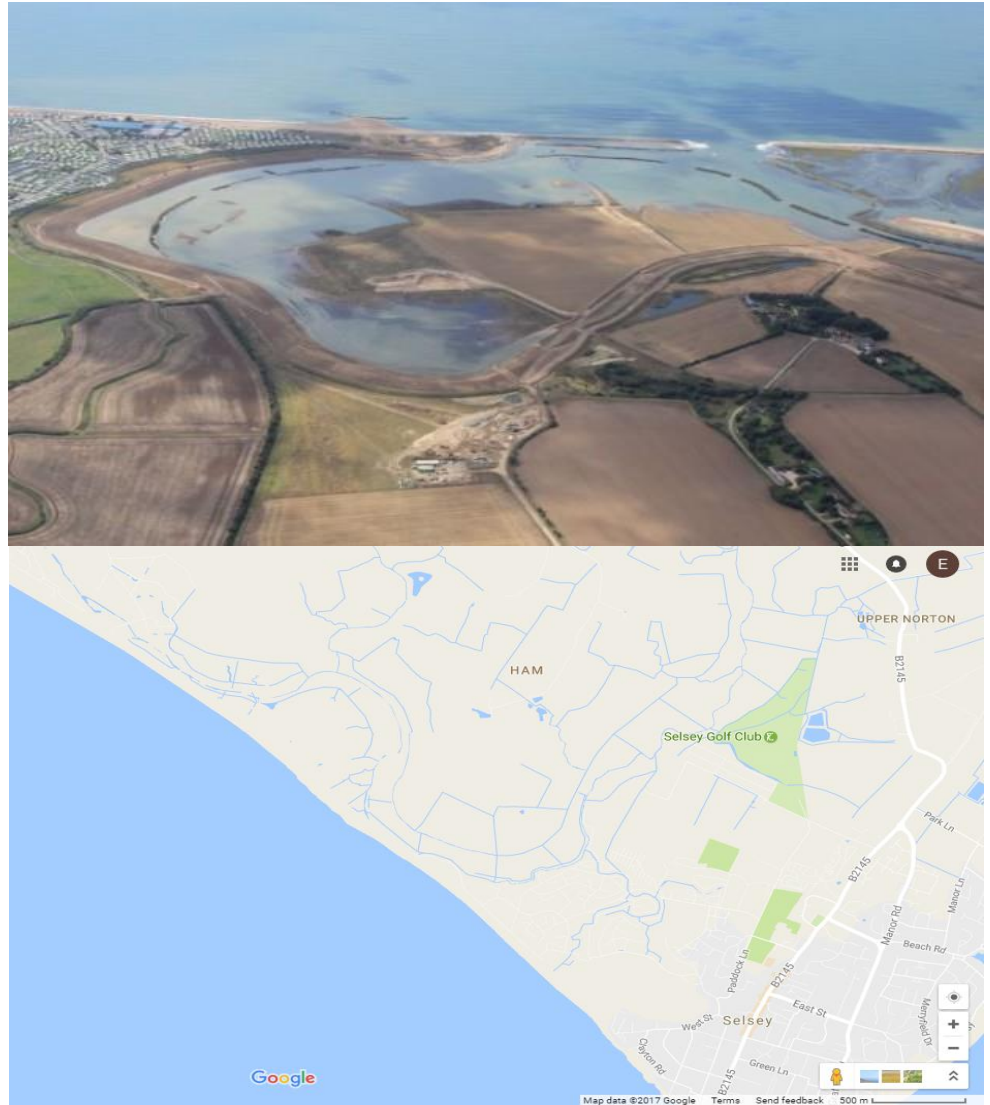
- ✓ You should show knowledge and understanding of the impacts/effects
- ✓ (social, economic or environmental) that tectonic events have on LIC's and HIC's.
- ✓ Impacts in LIC's tend to be more significant in terms of death toll (social) and injuries (social) but less in terms of financial cost (economic). Examples may include Haiti, China, Kashmir and Pakistan.
- ✓ Impacts in HIC's tend to be less significant in terms of death toll and injuries but far more significant in terms of financial cost. This is due to more expensive infrastructure to repair and high insurance claims.
- ✓ Examples may include USA, New Zealand, Italy and Japan.

Type of answer	Mark	Description
Perfect	7-8	<p><u>Balanced analysis and sophisticated judgement.</u></p> <p>A range of detailed and elaborated points are made both for and against the statement. Linked to relevant named places with examples of HICs and LICs.</p> <p>Conclusion is justified and uses complex reasons. The answer perfect and logically structured.</p>
Good	5-6	<p><u>Elaborated analysis and reasoned judgement.</u></p> <p>A range of elaborated points are made on one or both sides of the argument. Named to a relevant named place.</p> <p>A reasoned and valid conclusion is made based on evidence. Meaning is clear. The response is organised and well structured.</p>
Okay	3-4	<p><u>Valid but limited analysis and simple judgement.</u></p> <p>Valid points are made on one or both sides of the argument. Some are elaborated. Pupils will name a relevant place but may not offer any valid information on the tectonic event. Conclusion is made with limited justification. The response is structured.</p>
Basic	1-2	<p><u>Basic analysis and judgment.</u></p> <p>Valid but basic points are made with no elaboration. Basic conclusion. Statements are linked by a basic structure.</p>
Wrong	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

THEME 4: Coastal Hazards and their Management
If you have answered question 3 do not answer question 4.

Study the maps
and photograph
of Medmerry in
Figure 4.1.

Medmerry is the
site of a new
**managed
realignment
scheme.**



Define

Define
managed
realignment.
(1)

Defences/existing hard engineering defences are breached and the coastline is allowed to retreat inland.

Usually a combination of hard and soft engineering.

Suggest

(ii) With reference to **figure 4.1**, suggest one reason why the decision has been made to allow managed realignment at Medmerry.
(2)

Only suggest one reason

- ✓ Land at Medmerry is less valuable (1)
- ✓ farmland costs less to flood (1)
- ✓ Towns/cities/infrastructure (1) which would be expensive to replace (1)

Credit other valid responses

Assess

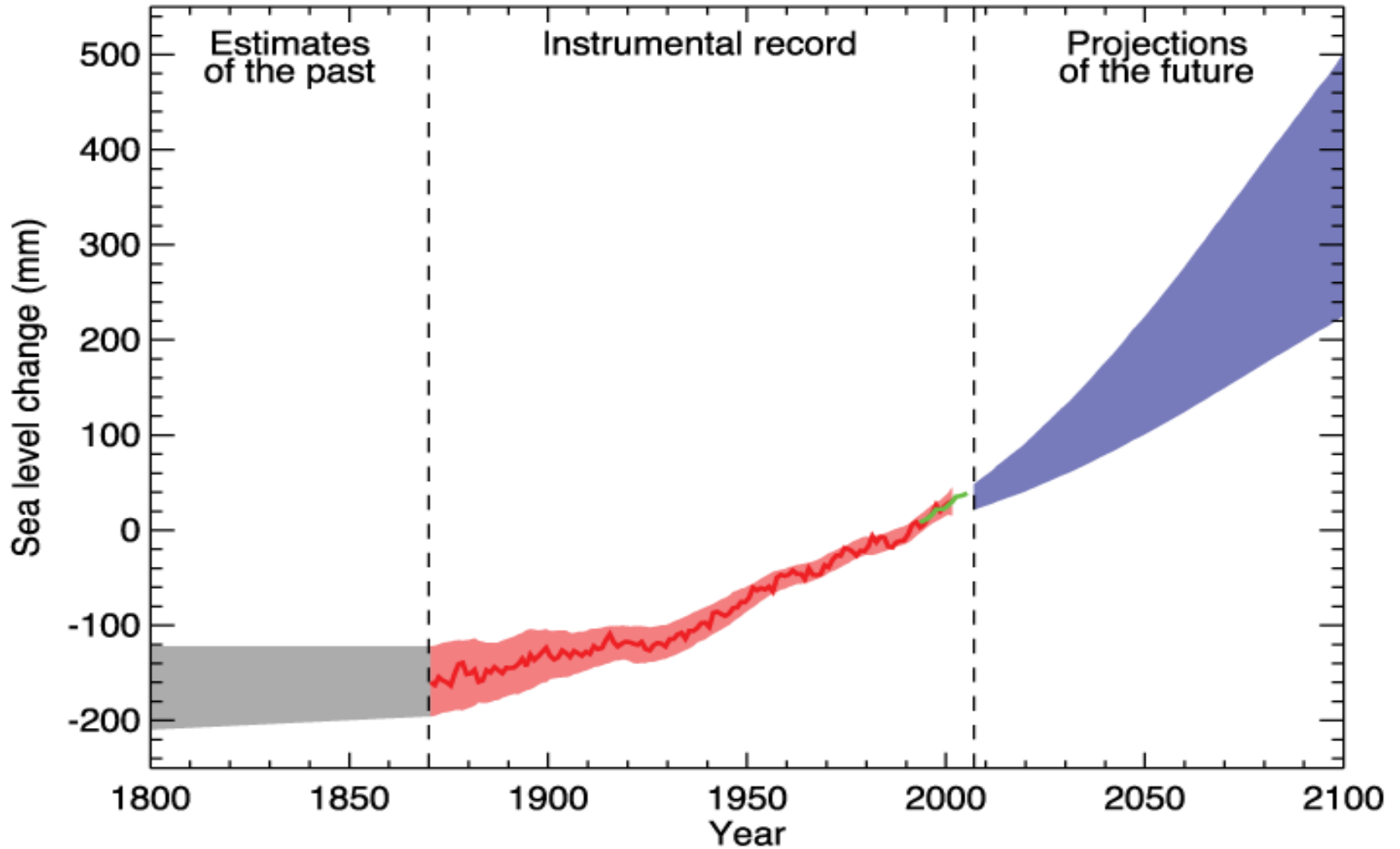
(iv) Assess **how successful** managed realignment has been in **one location** you have studied.
(4)

Responses should assess the **positives and negatives of managed realignment** and apply this to a location that they have studied.

For example, managed realignment relieves the pressure of sea level rise and erosion elsewhere along the coast, however, it means flooding land that could have previously been used for farming.

Type of answer	Mark	Description
Perfect	3-4	Elaborated statements which link assessment of a managed realignment scheme to a named place .
Okay	1-2	Basic statements which identify positives and negatives of managed realignment.
Wrong	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Study



Draw a line of best fit on figure 4.2.

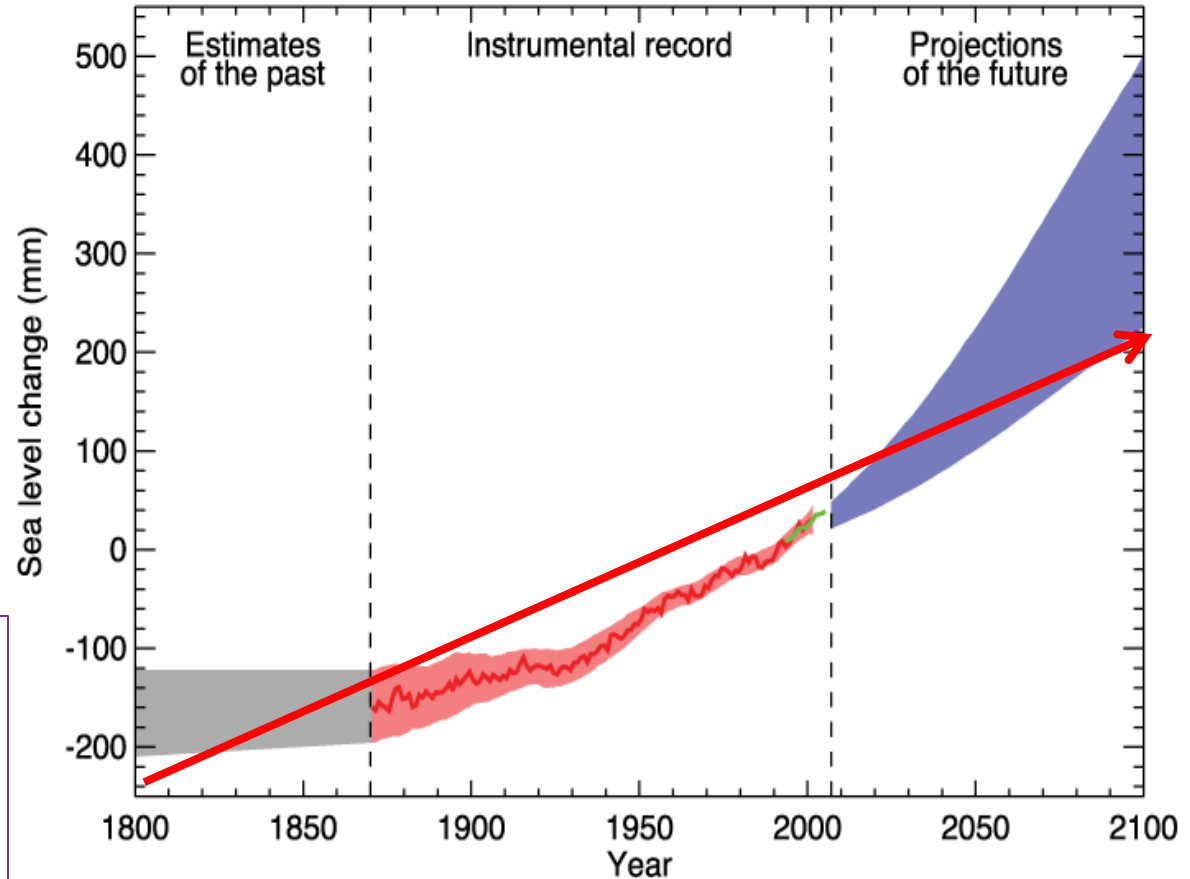
(1)

(ii) Describe the trend in the number of people at risk from sea level rise from 1990 to 2050, shown in **figure 4.2**.

(2)

- ✓ Positive relationship (1)
- ✓ number of people at risk increases with years (1)
- ✓ numerical comparison between 1990 to 2050 number of people at risk (1)

Draw & Describe



Suggest another data set that a GCSE student researching impacts of climate change on the UK would need.
(2)

Positive relationship (1)
number of people at risk increases with years (1)
numerical comparison between 1990 to 2050 number of people at risk (1)

Credit other valid statements.

Your task – (pairs)

- One person Brainstorm types of primary data you have collected in GCSE Geography
- One person list secondary data you have used in class

(iv) Explain how climate change is going to affect coastal communities in the UK by 2050. (4)

Important prompt words –
Explain – give reasons why
4 marks– give more than one (*not the same twice*)
Coastal communities –
places by the sea
2050 – *you can talk about events that will happen in the future*

Explain

You should explain how climate change is going to **impact people**.

- ✓ Include increased coastal erosion and sea level rise leading to increased spending on coastal management.
- ✓ Increased insurance
- ✓ Communities being forced to move.
- ✓ Land subsidence.
- ✓ Drainage problems.
- ✓ Higher river discharge.
- ✓ You must elaborate/explain

Study

Study
the table
below
and
answer
the
following
question

	Towyn	Kinmel Bay	Rhyl West	Cardiff	Wales
Very good health	34.0	40.9	38.8	50.4	46.7
Good health	31.2	30.3	29.9	31.1	31.1
Fair health	21.1	17.6	18.4	12.1	14.6
Bad health	10.6	8.5	9.9	4.8	5.8
Very bad health	3.1	2.7	3.0	1.6	1.8
One person in household with long-term health problem or disability (no dependent children)	31.8	27.3	35.0	21.5	25.2

▲ **Figure 24** Selected health data for the flood zone in North Wales compared to Cardiff and Wales as a whole. The 2011 census asked people to describe their general health over the preceding twelve months as 'very good', 'good', 'fair', 'bad' or 'very bad'. Figure 24 shows the percentage who responded in each category.

'Areas with health problems amongst the population are more vulnerable to coastal flooding.' To what extent do you agree with this statement? (8)

To what extent

‘Areas with health problems amongst the population are more vulnerable to coastal flooding.’ To what extent do you agree with this statement?
(8)

Your task – (Individually)

- Make a list of arguments for and against the statement
- Come up with a judgement; is there a link between areas with health problems and coastal flooding? Why?

Explain how far – *show how much you agree AND disagree with statement.*

Statement – *make sure your whole answer is focussed on points related to this sentence.*

To what extent (8)

(c) 'Areas with health problems amongst the population are more vulnerable to coastal flooding.' To what extent do you agree with this statement?
(8)

Important prompt words

Health problems

Coastal flooding

More vulnerable

Do you agree?

Look at the table. What ideas can you get from the table?

Type of answer	Mark	Description
Perfect	7-8	Balanced analysis and sophisticated judgement. A range of detailed and elaborated points are made both for and against the statement. Information in the resource is interpreted and analysed thoroughly. Conclusion is justified using a sophisticated chain of reasoning. Meaning is unambiguous. The response has clear purpose, is fluent and logically structured.
Good	5-6	Elaborated analysis and reasoned judgement A range of elaborated points are made on one or both sides of the argument. Information in the resource is interpreted carefully and used to support the argument. A reasoned and valid conclusion is made based on evidence. Meaning is clear. The response has purpose, is organised and well structured.
Okay	3-4	Valid but limited analysis and simple judgement Valid points are made on one or both sides of the argument. Some are elaborated. Valid but limited interpretation of information in the resource. Conclusion is made with limited justification. Meaning is generally clear. The response is structured.
Basic	1-2	Basic analysis and judgment Valid but basic points are made with no elaboration. Basic conclusion is made but with no justification. Meaning may lack clarity in parts. Statements are linked by a basic structure.
0	0	Award 0 marks if the answer is incorrect or wholly irrelevant.