

GCSE Geography – Snow work revision booklet and task sheets



Name

Target grade

Work through the booklet and complete the tasks on the unit of geography that you are currently doing. Some of the tasks are easier than others and it may mean that you will have to do some research on the internet to answer the questions.

Contents

- 1) Paper 1 – Living with the Physical environment
 - Tectonic hazards.
 - Weather hazards.
 - climate change.
- 2) Paper 2 – Challenges in the human environment
 - Urbanisation
 - Urban issues in LIC's LAGOS
 - Urban issues in HIC's – London
- 3) Geographical skills checklist
- 4) **Flipped learning – Desert tasks**

GCSE Revision Booklet

Paper 1: Living with the physical environment



- The challenge of natural hazards -
Question 1



The Challenge of Natural Hazards - Q1

Natural hazards pose major risks to people and property

What is a natural hazard?

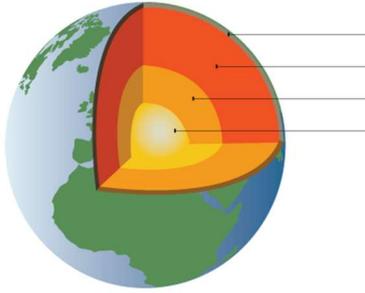


What is hazard risk?

Why is the frequency and strength of natural hazards increasing? (Think about the world's population and what people are doing to make the problem worse).

Earthquakes and volcanic eruptions are the result of physical processes

Label the layers of the earth on the image below and give three differences between oceanic and continental crust:

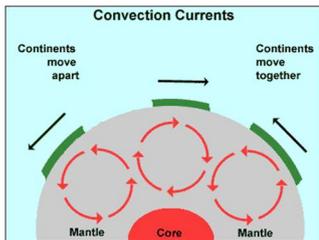


Oceanic crust	Continental crust

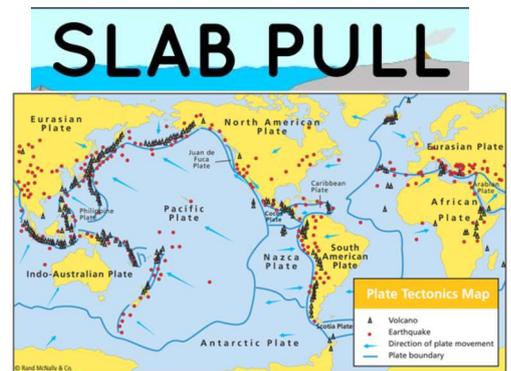
Outline the evidence that tectonic plates are moving.

What are the two theories behind why tectonic plates move?

THEORY 1



THEORY 2



Describe the **global distribution** of volcanoes and earthquakes, i.e. where are they?

Draw and annotate the 4 different plate margins in the boxes below. Be sure to explain why earthquakes and volcanoes occur at the plate margins.

<p>Constructive Margin</p>	<p>Destructive Margin</p>
<p>Conservative Margin</p>	<p>Collision Margin</p>

The effects of, and responses to, a tectonic hazard vary between areas of contrasting levels of wealth (i.e. effects of earthquakes are different in rich and poor countries).

What are primary and secondary effects?

What are immediate and long-term responses?

Complete the table below with 3 primary and 3 secondary effects of an earthquake and 3 immediate and 3 long-term responses to an earthquake:

Primary effects	Secondary effects
Immediate responses	Long-term responses

Named example of an earthquake in a high income country (HIC) : Christchurch, New Zealand, 2011



Outline the causes of the Christchurch earthquake.

Complete the tables below with 3 facts in each column - remember to include **SPECIFIC FACTS**, i.e. facts that could only have happened in Christchurch, e.g. numbers, names, etc.

Primary effects	Secondary effects

Immediate responses	Long-term responses

Do you think primary effects or secondary effects were more significant in Christchurch?

Do you think immediate or long-term responses were more significant in Christchurch? Why?

Named example of an earthquake in a low income country (LIC) : Haiti, 2010



Outline the causes of the Haiti earthquake.

Complete the tables below with 3 facts in each column - remember to include SPECIFIC FACTS, i.e. facts that could only have happened in Haiti, e.g. numbers, names, etc.

Primary effects	Secondary effects

Immediate responses	Long-term responses

Do you think primary effects or secondary effects were more significant in Haiti? Why?

Do you think immediate or long-term responses were more significant in Haiti? Why? _____

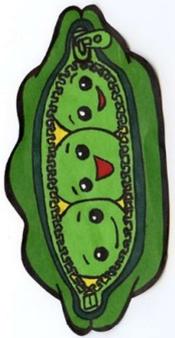
Explain why the effects and responses were so different in Christchurch and Haiti.

The effects were so different because

The responses were so different because

What is monitoring and what are the 3 Ps used to reduce the effects of earthquakes?

Monitoring is



Prediction is

Protection is

Planning is

Which of the above four strategies is the most effective in reducing the effects of earthquakes? Why?

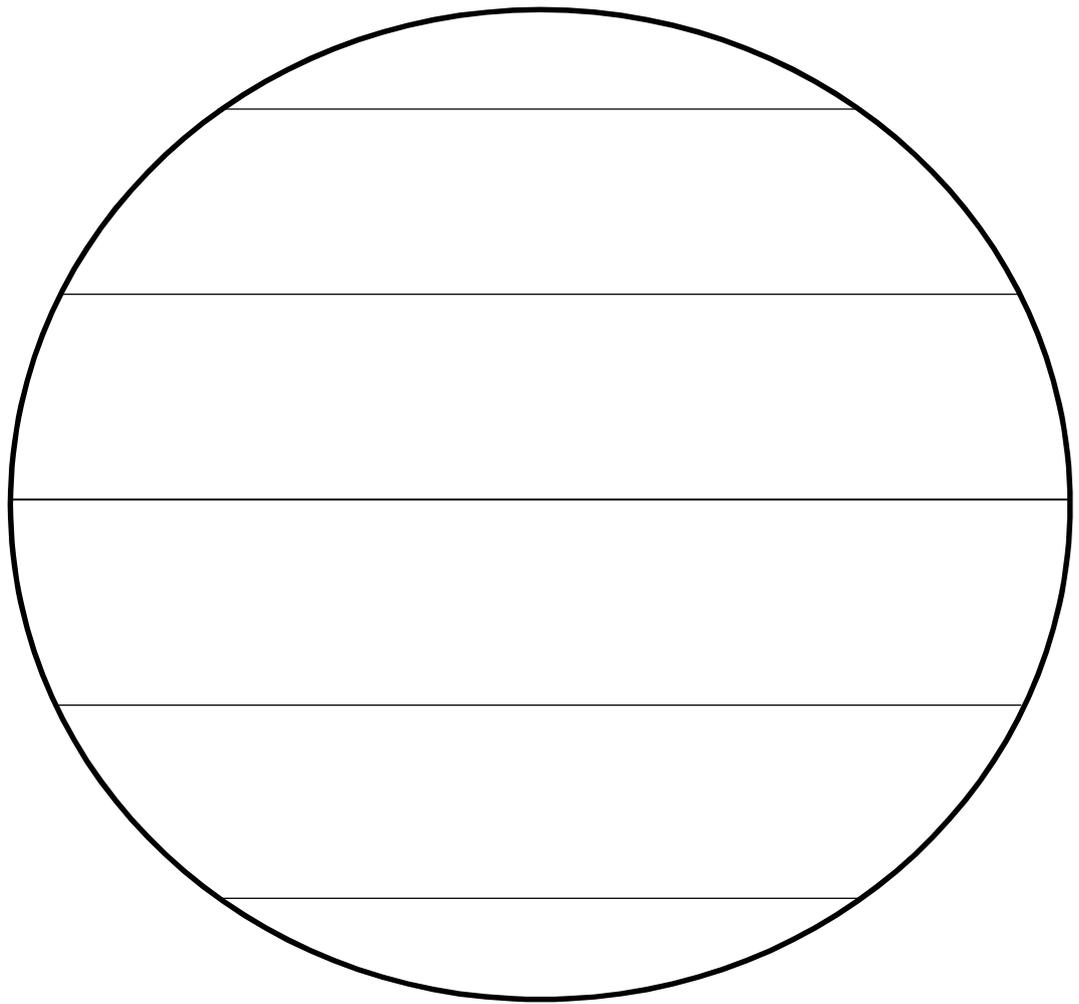
Which of the above four strategies is the least effective in reducing the effects of earthquakes? Why?



Global atmospheric circulation helps to determine patterns of weather and climate

On the model below, add the following features:

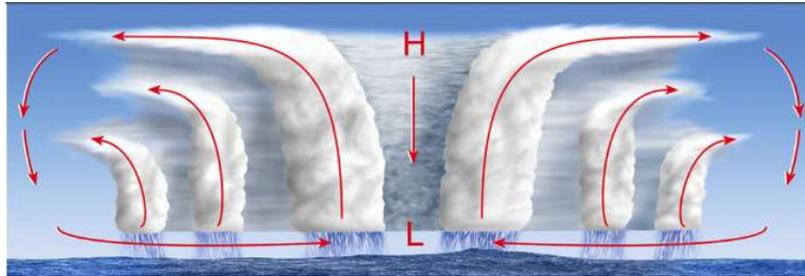
- 0° (equator), 30°N and S , 60°N and S and 90°N and S
- Polar, Ferrell and Hadley cells
- Areas of high and low pressure with sun and rain
- NE trade winds, SE trade winds, south-westerly winds, north-westerly winds and polar easterly winds



What is the Coriolis Effect?

Tropical storms (hurricanes, cyclones, typhoons) develop as a result of particular physical conditions

Label the diagram below with the characteristics of tropical storms:



Give the likely 24 - 48 hour weather forecast for the island to the north west of the tropical storm.



How is climate change likely to affect the distribution, frequency and intensity of tropical storms?

Distribution:

Frequency:

Intensity:

Named example of a tropical storm: Typhoon Haiyan, 2013



Describe the path of Typhoon Haiyan.

Complete the tables below with 3 facts in each column - remember to include SPECIFIC FACTS, i.e. facts that could only have happened in Typhoon Haiyan, e.g. numbers, names, etc.

Primary effects	Secondary effects

Immediate responses	Long-term responses

Do you think primary effects or secondary effects were more significant in Typhoon Haiyan?

Do you think immediate or long-term responses were more significant in Typhoon Haiyan?

How can you monitor, predict, protect against and prepare for tropical storms? Give some examples of each in the table below:

<p>Monitor</p>	<p>Predict</p>
<p>Protect</p>	<p>Prepare</p>

The UK is affected by a number of weather hazards

What is extreme weather?

Annotate the photograph below describing the **social**, **economic** and **environmental** impacts of severe snowfall in the UK (include impacts you might not be able to see in the image):



Extreme weather events in the UK have impacts on human activity

Named example of a recent extreme weather event in the UK: Cumbria floods 2009

Outline the causes of the Cumbria floods.



Complete the table below to show the social, economic and environmental impacts of the Cumbrian floods (be specific):

Social impacts	Economic impacts	Environmental impacts

What management strategies were used to reduce the risk to people and the environment?

Immediate responses	Long-term responses

Give 3 pieces of evidence to prove that weather is becoming more extreme in the UK (use your timeline and include facts to show why it was extreme):

- _____

- _____

- _____

Climate change is the result of natural and human factors and has a range of effects

Complete the table below to briefly explain how each factor provides evidence of climate change:

Long-term evidence	Recent evidence
Ice cores:	Melting ice:
Tree rings:	Seasonal changes:
Ocean sediments:	Instrument readings:



Briefly explain how each of the following factors cause climate change:

Natural causes	Human causes
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Orbital changes:	Use of fossil fuels:
Volcanic activity:	Agriculture:
Solar output:	Deforestation:

Add 6 labels onto the map below to show the global effects of climate change on people and the environment (they could be positive or negative):



Managing climate change involves both mitigation (reducing causes) and adaptation (responding to change)

What is the definition of mitigation?

What is the definition of adaptation?

Complete the table below to show how we can mitigate and adapt to climate change and briefly outline how each one helps to reduce the effects of climate change:

Mitigation methods	Adaptation methods

What are the advantages and disadvantages of mitigation and adaptation?

Method	Advantages	Disadvantages
Mitigation		
Adaptation		

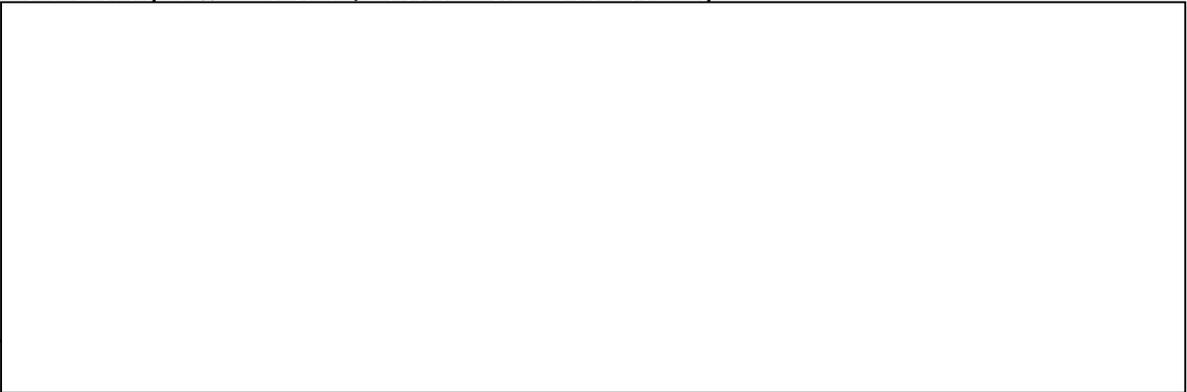
Glacial Landscapes in the UK - Q4

What is a glaciated environment?

Processes in glacial environments

Freeze-thaw weathering

Draw a diagram to show freeze-thaw weathering



Erosion

Process	How it works	Evidence left behind
Abrasion		
Plucking		

Movement and transportation

Explain rotational slip

How do glaciers transport material?

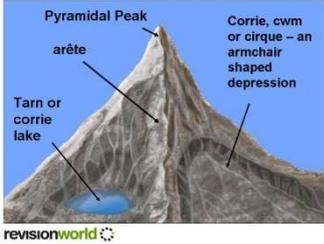
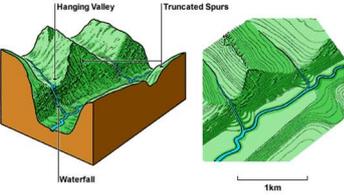
Deposited material

Draw an annotated diagram to show the differences between:

Till	Outwash

Erosional landforms

Landform	Formation	Sketch	Example in the UK
Corrie			

Arete			
Pyramidal peak		 <p>Pyramidal Peak arête Tarn or corrie lake Corrie, cwm or cirque – an armchair shaped depression</p> <p>revisionworld</p>	
Glacial trough			
Truncated spur		 <p>Hanging Valley Truncated Spurs Waterfall 1km</p>	
Hanging Valley			
Ribbon Lake			

Depositional landforms

Moraine

Label this diagram with the different types of moraine.



Where does the material come from?

Drumlins

Draw a sketch of a drumlin and label the following features:

- Blunt stoss end
- Tapered end
- Basket of eggs
- Direction of ice flow

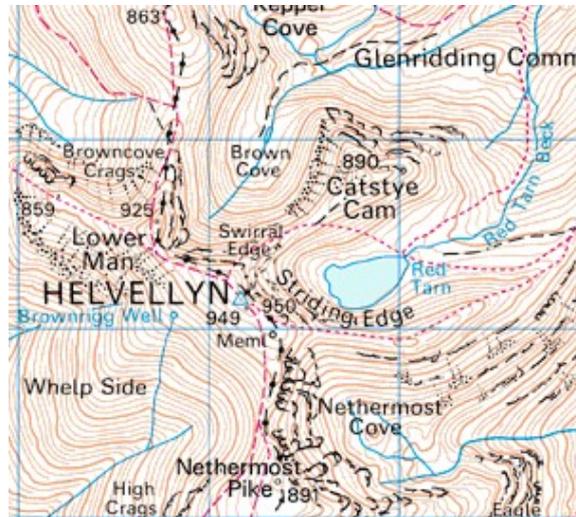
Erratics



How do you know the boulder in the picture is an erratic?

Glacial landforms on an OS map

Identify as many landforms as you can on this map,



Economic Opportunities in Glaciated areas

<p>Farming</p>	<p>Quarrying</p>
<p>Forestry</p>	<p>Tourism</p>

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Economic activity causes conflict in glaciated areas

Activity	How it causes conflict and with whom?
Quarrying	
Tourism	
Water storage	

Case study: Glenridding zip wire

Location

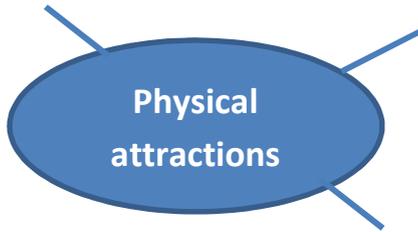
What?



Reasons for	Reasons against

Managing tourism in the Lake District

Why do people visit the Lake District?



Impacts of tourism in the Lake District

Colour code the following into social environmental and economic

In 2014 tourists spent nearly £1000 million in the Lake district, This supports hotels, shops and restaurants	The main tourist honeypot sites and footpaths show signs of overcrowding - footpath erosion, litter, damage to verges by cars	Pollution from vehicles and boats can damage ecosystems
Walkers can damage farmland by trampling crops of leaving litter. Dogs disturb sheep and cattle	Thousands of local people work in shops , hotels and other services	Jobs are seasonal, poorly paid and unreliable which affects the local people.
House prices are high - 20% of property is either holiday rental or second homes which means local people cannot afford to buy a home in the area	Ub 2014 14.8 million tourists visited the Lake District. This had a massive impact on the locals	Traffic congestions slows down business communications.

Now put a P if it is positive impact and N if it is a negative impact.

How is tourism managed?

Complete the following two using specific facts and information from the Lake District.

Managing traffic congestion	Managing footpath erosion

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Coastal Landscapes in the UK - Q3

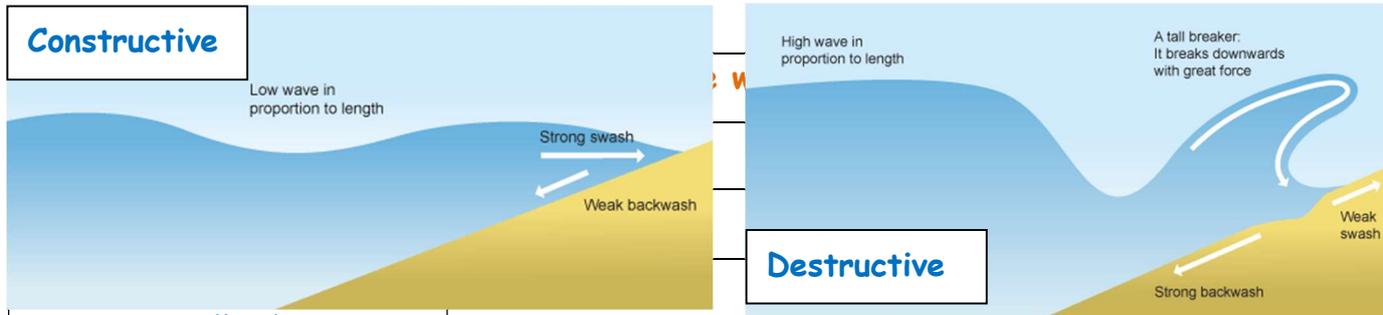
The coast is shaped by a number of physical processes

What is a wave?

What causes a wave?

What is the fetch?

There are two types of waves: constructive and destructive. Complete the table below to show the characteristics of each wave using the image to help you:



Constructive spilling)		
Strength of swash		
Strength of backwash		
Beach sediment - gain or loss		

Why do you think the backwash is often weaker on a pebbly beach?



What is weathering?

What is **mechanical weathering**?

What is **chemical weathering**?

What is mass movement?

Complete four simple diagrams and four definitions to show the different types of mass movement:

<p style="text-align: center;"><u>Rockfall</u></p>	<p style="text-align: center;"><u>Landslide</u></p>
<p style="text-align: center;"><u>Mudflow</u></p>	<p style="text-align: center;"><u>Rotational slip</u></p>

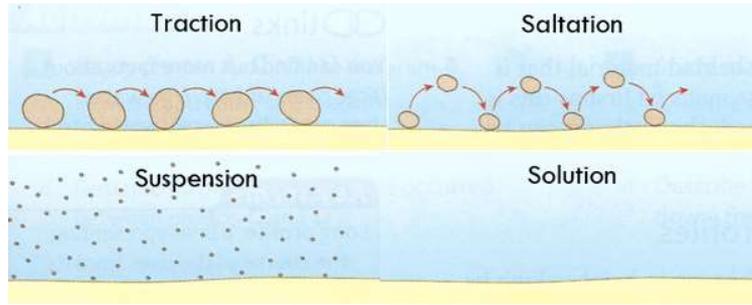
Complete the table below describing the four types of erosion found at the coast:

<u>Hydraulic action</u>	<u>Abrasion</u>
<u>Attrition</u>	<u>Solution</u>

What is an additional type of erosion found at the coast? What does it mean?

Do the same in the table below to describe the four types of transportation found at the coast:

<u>Traction</u>	<u>Saltation</u>
<u>Suspension</u>	<u>Solution</u>



Draw an annotated diagram in the box below to explain the process of longshore drift:

What is coastal deposition?

Give 3 reasons why coastal deposition occurs:



- _____

- _____

• _____

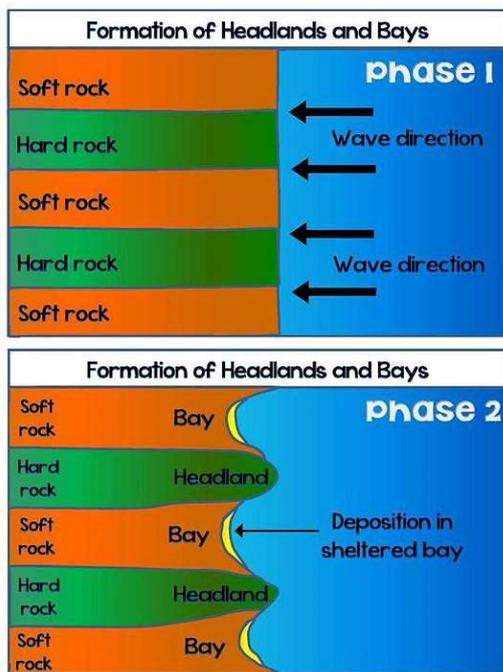
Distinctive coastal landforms are the result of rock type, structure and physical processes

Outline the two factors that influence coastal forms:

Rock type:

Geological structure:

Landforms resulting from erosion



Headlands and Bays

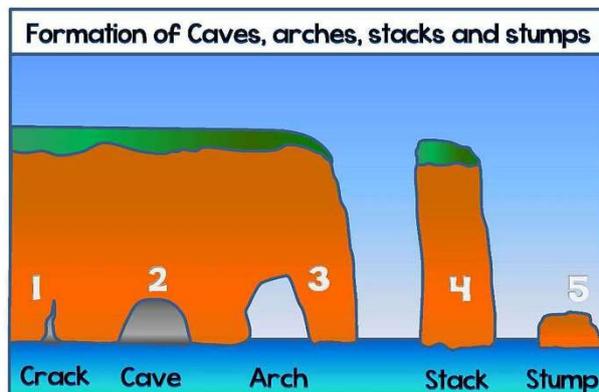
Explain how headlands and bays form using the diagram to help you. Remember to include key terms where necessary.

Cliffs and wave-cut platforms

Complete annotated diagrams below to explain how a wave-cut platform is created:

Caves, arches, stacks and stumps

Annotate the diagram below to explain the formation of caves, arches, stacks and stumps. Number your annotations to sequence the formation.



Landforms resulting from deposition

Beaches

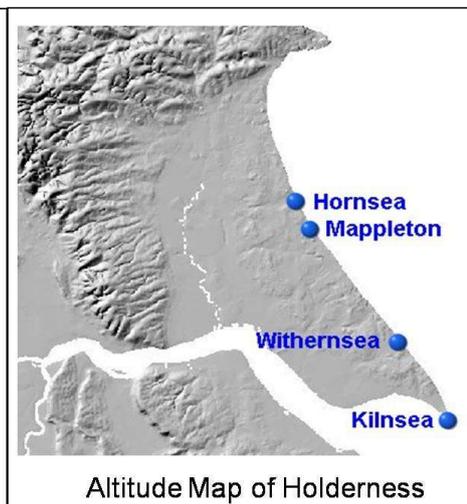
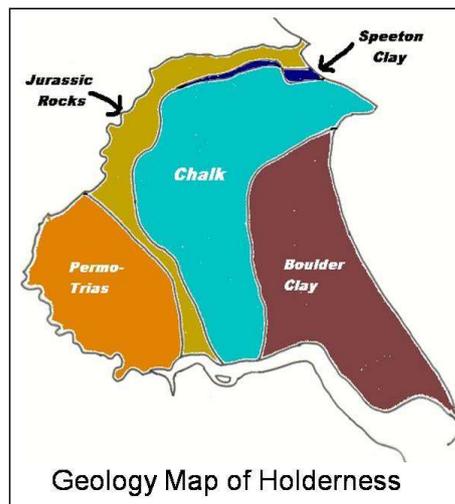
Beaches are deposits of sand and shingle at the coast. Explain how both sandy and pebbly beaches form:

Draw an annotated diagram in the box below to explain the formation of spits and bars:



An example of a section of coastline in the UK: Holderness Coast, Yorkshire

Describe the geology of the Holderness Coast.



Describe the features found along the Holderness Coast from Flamborough Head in the north to Spurn Point in the south.



Flamborough Head



Slumping at Bridlington

Spurn Point



Different management strategies can be used to protect coastlines from the effects of physical processes

Hard engineering:

Soft engineering:

Managed retreat:

Complete the table below showing the advantages and disadvantages of hard and soft engineering methods:

Method	Advantages	Disadvantages
Sea wall		
Groynes		
Rock armour		
Gabions		
Beach nourishment		
Dune regeneration		
Managed retreat		

An example of a coastal management scheme in the UK: Holderness Coast

Why does the Holderness Coast need protecting?

List 5 strategies used in the Holderness Coast to protect the coastline:



- ---

- ---

- ---

- ---

What are the positive and negative impacts of the defences on the area?

Positive impacts	Negative impacts

What groups of people might be in conflict over these defences and why?

Groups	Conflict

Year 11 Revision Booklet

Paper 2: Challenges in the human environment



- Urban issues and challenges - Question 1

Urban Issues and Challenges - Q1

A growing percentage of the world's population lives in urban areas

What is urbanisation?

Describe the changes to the urban population in developed (HIC) and developing (LIC) countries.

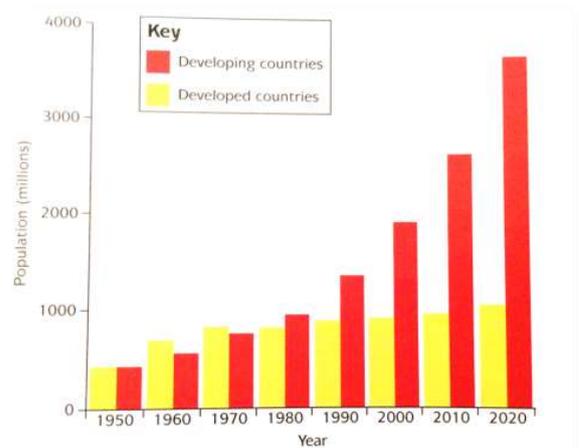


Figure 1 Urban population in developed and developing countries.

Why is urbanisation happening at a faster rate in LICs and a slower rate in HICs?

Outline the factors below to explain how they affect the rate of urbanisation:

- Migration (push and pull factors):



- Natural increase:

What is a megacity?



What is rural-urban migration?



Describe the distribution of the world's megacities.

Urban growth creates opportunities and challenges for cities in LICs and NEEs

Case study of a major city in a LIC - Lagos, Nigeria

Complete the table to show why Lagos is important regionally, nationally and internationally:

Regionally	Nationally	Internationally
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Why is Lagos a growing city? (Think

about natural increase and migration).

Complete the mind map below to show the social and economic opportunities for people living in Lagos:



What are the challenges created by urban growth in Lagos? Complete the table with brief notes to show these challenges:

Squatter settlements	Clean water, sewage and electricity	Health and education	Unemployment and crime	Waste, pollution and traffic congestion

An example of how urban planning is improving the quality of life for the urban poor:

List 5 improvements that were made by the Lagos Urban planning project.

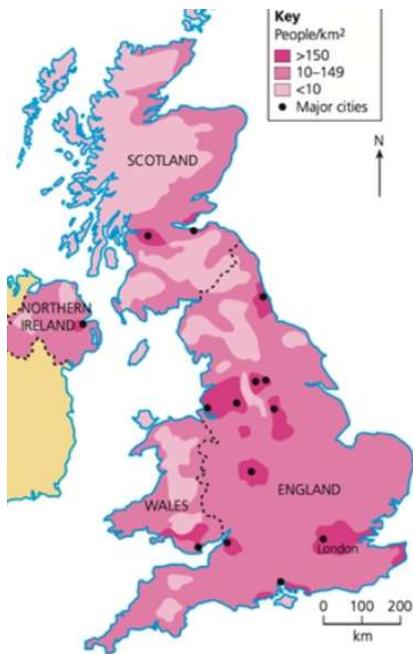


- _____
- _____
- _____
- _____
- _____

What were the successes and failures of the Project?

Successes	Failures

Urban change in cities in the UK leads to a variety of social, economic and environmental opportunities and challenges



Describe the population distribution in the UK. Include names of cities and compass points in your answer. Include most and least populated areas.

A case study of a major city in the UK: London

List 5 reasons why London is a major city, both in the UK and in the wider world:

- _____

- _____
- _____
- _____
- _____

How has migration impacted on the growth and character of the city? Think about what you find in London and where the influence might have come from, e.g. Chinatown.

Outline the opportunities created by urban change in London in the table below:

Cultural mix	Recreation and entertainment	Employment	Transport systems	Urban greening
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Complete annotations below to explain the challenges created by urban change in London.

Environmental dereliction,
building on brownfield and
greenfield sites, waste
disposal

Social and economic:
deprivation, inequalities in
housing, education, health and
employment



Impact of urban sprawl on
the rural-urban fringe and
the growth of commuter

An example of an urban regeneration project: London Olympic Park

Why did the area need regeneration?

Complete the table below to show the main features of the project:

Social improvements	Economic improvements	Environmental improvements

Urban sustainability requires management of resources and transport

What is the definition of 'sustainable urban living'?

Identify 5 features of a sustainable city:

- _____

- _____

- _____

- _____

- _____

Choose 2 from your list above and explain how this characteristic makes a city sustainable:

- _____

- _____



How urban transport strategies are used to reduce traffic congestion:

Give 2 reasons why there are more cars on the roads now:



- _____

- _____

Outline what London has done to reduce traffic and the effects of traffic:

Pedestrianisation	Underground	Metroshuttle	Bike hire	Electric bollards

Identify the advantages and disadvantages of the schemes used by Manchester to reduce traffic:

Advantages/successes	Disadvantages/failures