#### my revision notes

### EDEXCEL GCSE (9–1)

## **GEOGRAPHY A**

SECOND EDITION



Steph Warren



### My revision planner



#### **Component 1: The Physical Environment**

- 1 The changing landscapes of the UK
- 2 Coastal landscapes and processes
- 3 River landscapes and processes
- 4 Glaciated upland landscapes and processes
- 5 Weather hazards and climate change
- 6 Ecosystems, biodiversity and management

#### **Component 2: The Human Environment**

- 7 Changing cities
- 8 Case study of a major UK city: Bristol
- 9 Case study of a major city: São Paulo
- 10 Global development
- 11 Resource management
- 12 Energy resource management
- 13 Water resource management

#### **Component 3: Geographical Investigations**

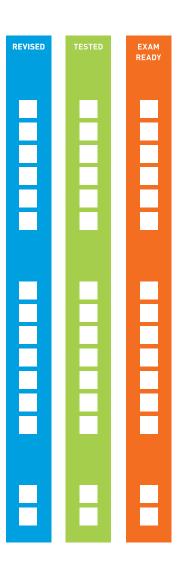
- 14 Geographical investigations: fieldwork
- 15 Geographical investigations: UK challenges

#### Now test yourself answers

#### **Glossary**

#### **Exam practice answers at**

www.hoddereducation.co.uk/myrevisionnotes



### 2 Coastal landscapes and processes

#### Physical processes shape coastal landscapes

What are the physical processes at work on the coast?

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#### What are the main types of weathering?

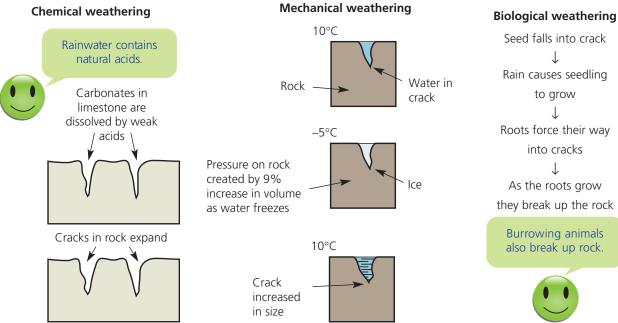


Figure 1 Types of weathering

#### Now test yourself

- 1 State **three** types of weathering.
- 2 Explain the process of mechanical weathering.

#### What is mass movement?

Mass movement is when material moves down a slope due to the pull of gravity. You need to know about slumping and sliding.

#### Slumping

- A large area of land moves down a slope.
- It is common on clay cliffs.
- Dry weather makes the clay contract and crack.
- When it rains, water gets into the cracks.
- The soil becomes saturated.
- A large piece of rock is pulled down the cliff face.
- It has slipped on the slip plane of saturated rock.

#### Roots force their way into cracks As the roots grow

Burrowing animals also break up rock.



Weathering is the way that rocks are broken down in situ

Mass movement is when material moves down a slope, pulled down by gravity.

#### Exam practice

Explain one type of mass (3 marks) movement.

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#### What is erosion, transport and deposition?

The coast is under continual attack from waves at the base of the cliff and other processes on the cliff face such as weathering and mass movement.

**Erosion** is when rocks are worn down by an agent of erosion such as water.

**Hydraulic action** occurs when the compression of air in cracks puts pressure on the rock and causes pieces of the rock to break off.

**Abrasion** occurs when sand and pebbles carried in waves are thrown against the cliff face.

**Solution** is when chemicals in sea water dissolve certain rock types, such as chalk.

**Attrition** is the breaking up of rocks and pebbles in the waves. The movement of waves means that rocks are continually knocked against each other, removing any sharp edges, to produce smooth pebbles and, eventually, sand.

**Transportation** is the movement of sand and pebbles by the sea.

**Deposition** is the putting down of sand and pebbles by the sea.

**Traction** is the rolling of large sediment such as pebbles along the sea bed.

**Saltation** occurs when small pieces of shingle or large grains of sand are bounced along the sea bed.

**Suspension** is when small particles such as sand and clays are carried in the water. This can make the water look cloudy especially during storms or when the sea has lots of energy.

Swash is the forward movement of a wave.

Backwash is the movement of the wave back down the beach.

**Fetch** is the distance over which the wind blows over open water.

#### The process of longshore drift

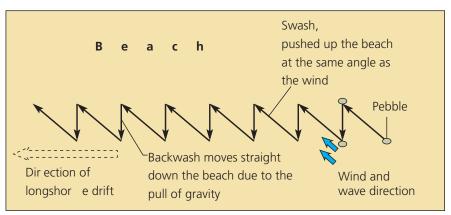


Figure 2 The process of longshore drift

#### Exam tip

Make sure you know all of the terms in the key terms box as you could be asked to define them in an exam.

#### Exam tip

Remember, attrition is not a type of erosion that erodes cliffs.

### How does geological structure have an impact on landforms?

Impact of geological structure on

landforms

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Well-jointed rocks or ones with lines of weakness will erode more quickly as the waves exploit them.

Concordant coastlines have rocks that are parallel to the coastline. They have alternate layers of hard (more resistant) and soft (less resistant) rock. The hard rock acts as a barrier to the erosive power of the soa

Cliffs made from resistant rock, like granite, will erode more slowly than cliffs made from less resistant rock, such as clay.

Discordant coastlines have rocks which are at right angles to the sea. If there are alternate layers of hard and soft rock, the soft rock will erode more quickly forming bays with the hard rock forming headlands.

#### What types of waves are there?

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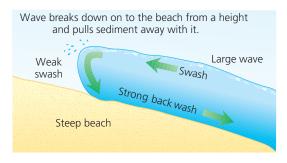




Figure 3a A destructive wave

Figure 3b A constructive wave

#### Now test yourself

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State **two** differences between constructive and destructive waves.

### How does the UK's weather and climate affect rates of coastal erosion?

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- **Seasonality** in the winter the differences between day and night time temperatures can cause freeze-thaw weathering on a cliff face.
- Storms more storms are occurring which have an impact on the landforms of the coastline as storm waves are more powerful agents of erosion.
- **Prevailing wind** this is the wind from the southwest. The coastlines of Cornwall and Devon experience winds that may have blown for several thousand kilometres across the sea. These winds have a long fetch. The longer the fetch, the stronger the wind and the more powerful the wave, thus increasing the rates of erosion on these coastlines.

### 10 Global development

## Definitions of development vary as do attempts to measure it

**Secondary sector** includes manufacturing industry. The number of people employed in this sector increases as a country develops.

**Primary sector** is made up of extractive industries, such as farming, fishing, forestry and mining. Developing countries have high numbers of people employed in this sector.

**Development** refers to an improvement in the quality of life for the population of a country.

**Tertiary sector** is the service industry and includes jobs such as teaching. Very few people are employed in this sector of industry in a developing country.

Quaternary sector includes financial services and telecommunications.

**Development gap** is the difference between the parts of the world that have the wealth and the parts that do not.

**North-South divide** is a virtual socioeconomic and political line on the globe which splits the developed and wealthy countries in the 'North' from the poorer developing countries the 'South'.

# What are the contrasting ways of defining development, using economic criteria and broader social and political measures?

#### Exam tip

Don't forget to learn the key words for this section.

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Economic development	An increase in a country's wealth. This could be an increase in people working in the secondary sector and a decrease in the numbers of people working in the primary sector. It could be indicated by a greater use of natural resources, for instance, energy use per head of population increases.
Social development	A number of changes that have a direct impact on the population's quality of life. This could include improved levels of literacy through greater access to education, better housing conditions and more doctors.
Political development	Freedom for the people to have a greater say in who governs their country.
Cultural development	This could involve better equality for women and better race relations.

Figure 1 Four types of development

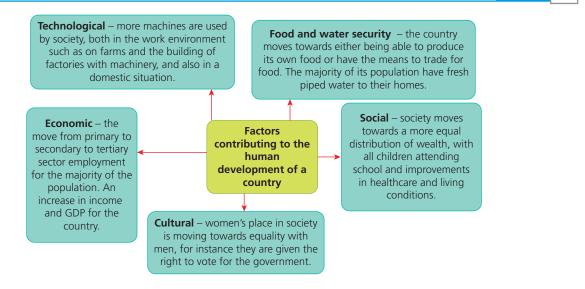
#### Now test yourself

**TESTED** 

Describe the different types of development.

### What factors contribute to the human development of a country?

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#### **Exam practice**

State **two** factors that contribute to the human development of a country.

(2 marks)

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### What are the different ways that development is measured?

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Development measure	Description
Gross domestic product (GDP) per capita	This is the value of all the goods and services produced in a country during a year, in US dollars. Per capita means that the figure is divided by the number of people who live in the country to give an average per person.
Human Development Index (HDI)	This is a comparative measure of different aspects of life between countries. The measures used are life expectancy, education and standards of living.
Measures of inequality	These are ways of measuring how equal people are within a country or between countries. This is often a measurement of the wealth or health care of people in a country or between countries.
Corruption Perceptions Index	This is the perceived corruption in governments and the public sector. It is a perception because corruption is hidden and therefore difficult to measure. It means that government officials are using development for their own betterment rather than the betterment of the country.

Figure 2 The different ways that development is measured

# Exam practice Define the term 'Human Development Index' (HDI). (2 marks) ONLINE