

# Supporting your child with Geography GCSE at Plymstock School Edexcel B



## Content Overview

The Edexcel Geography B course is a two-year course, allocated 6 teaching hours a fortnight.

	Global Geographical Issues	UK Geographical Issues	People and Environment Issues-Making Geographical Decisions
Content Overview	<b>Hazardous Earth</b> Studies tropical storms and tectonic hazards <b>Development Dynamics</b> A study of an emerging country <b>Challenge of an Urbanising World</b> A study of a mega city in a developing or emerging country	<b>The UK'S Evolving Physical Landscape</b> <ul style="list-style-type: none"> <li>2 studies of coastal and river landscapes and issues</li> <li>Fieldwork investigation: physical</li> </ul> <b>The UK'S Evolving Human Landscape</b> <ul style="list-style-type: none"> <li>Case study of a dynamic UK city</li> <li>Fieldwork investigation: human</li> </ul>	<b>People and the Biosphere</b> <b>Forests Under Threat</b> <b>Consuming Energy Resources</b>  All three topics will form the basis of a decision-making exercise where students draw together understanding and skills from the whole course
Assessment overview	<b>☒ 37.5%</b> <b>✓ 94 marks</b> <b>⌚ 1 hour 30 minutes</b>	<b>☒ 37.5%</b> <b>✓ 94 marks</b> <b>⌚ 1 hour 30 minutes</b>	<b>☒ 25%</b> <b>✓ 64 marks</b> <b>⌚ 1 hour 30 minutes</b>

The Pearson Edexcel Level 1/Level 2 GCSE (9–1) in Geography B consists of three externally examined papers. Students must complete all assessments in May/June in any single year.

This GCSE course will deepen understanding of geographical processes, illuminate the impact of change and of complex people-environment interactions, highlight the dynamic links and interrelationships between places and environments at different scales, and develop students' competence in using a wide range of geographical investigative skills and approaches.

The aims and objectives of this qualification are to enable students to build on their Key Stage 3 knowledge and skills to:

- Develop and extend their knowledge of locations, places, environments and processes, and of different scales, including global; and of social, political and cultural contexts (know geographical material)
- Gain understanding of the interactions between people and environments, change in places and processes over space and time, and the interrelationship between geographical phenomena at different scales and in different contexts (think like a geographer)
- Develop and extend their competence in a range of skills, including those used in fieldwork, in using maps and Geographical Information Systems (GIS) and in researching secondary evidence, including digital sources; and develop their competence in applying sound enquiry and investigative approaches to questions and hypotheses (study like a geographer)
- Apply geographical knowledge, understanding, skills and approaches appropriately and creatively to real-world contexts, including fieldwork, and to contemporary situations and issues; and develop well-evidenced arguments, drawing on their geographical knowledge and understanding (applying geography).

## Assessment Material

The '**ramping up**' of demand is consistent throughout the exam questions and papers so all students can successfully engage with every part of the exams.

**Answer only two questions from Question 2 (Coastal landscapes and processes), Question 3 (River landscapes and processes) and Question 4 (Glaciated upland landscapes and processes).**

### Question 2: Coastal landscapes and processes

If you answer Question 2 put a cross in the box  .

Coastal landscapes are constantly being changed by different processes.

**2 (a)** Study Figure 1 in the Resource Booklet.

(i) Identify **one** erosional landform shown in the coastal landscape on Figure 1.

(1)

**'Explain'** require a justification or exemplification of a point. They will always carry 2, 3 or 4 marks, depending on whether a figure is used or if more than one point is expected.

State **one** type of biological weathering that might have an impact on this landscape.

(1)

(ii) Rip rap is an example of hard engineering.

Explain **one** way rip rap helps protect coastal landscapes.

(2)



(Source: thetimes.co.uk/tto/multimedia/archive/00361/117597242\_361456c.jpg)

**Figure 1**

A diagram showing a stretch of coastline in Southern England

Questions start with **accessible** items so that all students gain confidence. The question then **ramps up in demand**, finishing with an extended-response question for 8 marks.



## Top Tips for answering GCSE exam questions in Geography

- Underline and focus upon key words, using the **BUG** strategy. **Box** the command word, **underline** the keywords and **glance** back.
- Use the marks awarded for each question to indicate the length and depth of response e.g. 8 mark question will require development of points through explanation, whilst smaller marked questions such as 2 marks will require simple recall or statements to given.
- Remember to PEE(A)L when undertaking extended writing and addressing longer mark questions.
  - **P Point** – make your point
  - **E Evidence** – give your evidence
  - **E(A) Analyse/ explain** – explain your evidence
  - **L Link** – if possible link your next point or your original point.
    - **For example:** Volcanic activity occurs around the Pacific Ring of Fire because many destructive plate boundaries are located here. One example is the destructive boundary between the continental South American plate and the oceanic Pacific plate which has formed the Andes mountains. The denser oceanic plate is subducted underneath the continental plate and melts as it falls into the hot mantle. Magma then rises up through the continental plate and is erupted through volcanoes at the surface. The destructive boundaries all around the Pacific Ring of Fire are the reason for high volcanic activity.
    - **For example:** Spits are depositional landforms formed through longshore drift. An example of a spit is Spurn Head. This was formed when waves hit the beach at an angle material is pushed up the beach at the same angle as swash. In this way the material is moved along the beach as longshore drift. Where there is a curve in the coastline the material continues to move in the same direction, being deposited as a spit. This process is called longshore drift and is the process which creates spits.
- **Other acronyms to consider with assess questions include:**
  - Use the **APE** structure:
    - **Assess:** 'To a \_\_\_\_ extent .... [Link to question].'
    - **Point:** Detail about the scheme or factor.
    - **Explain:** 'This means'... explain the significance.
    - Then repeat for alternative points before concluding.
  - Use the **PEDAL** structure:
    - **Point:** State the main focus for your paragraph e.g. one impact...
    - **Evidence:** Include a piece evidence/ fact about the point of discussion
    - **Develop/ explain:** 'This means'... explain the significance.
    - **Assess:** 'To a \_\_\_\_ extent ....'
    - **Link:** Link back to question.
    - Then repeat for alternative points before concluding.
- Use geographical terminology throughout.
- Use your own background knowledge. The examiner will often ask you to write about places you have studied. You must write about real places - make sure you name and locate them

(say where they are). If you can't remember the examples studied in lessons, then use your common sense... somewhere you've seen on TV, read about, visited on holidays etc.

- Ensure that the only questions answered are the ones you have studied.
- If the question has two command words e.g. describe and explain, make sure the response addresses both aspects.
- If there are figures and inserts, clearly make reference to the written response to demonstrate to the examiner that you have engaged with the additional material (resources) provided. For example, Photograph A shows a cave on the side of a headland, which is in the foreground of the image. To the east of the image two headlands can be found jutting out into the bay.
- Make sure that diagrams and graphs are drawn in pencil and annotated in pen.
- Annotations or diagrams/ sketches that require labels must have an arrow drawn with a pencil and the arrow must touch the exact point you are referring to.
- Use **HOLT** to analyse and explain graphs.
  - **H:** where the feature/ data is high
  - **O:** where the feature/ data is odd
  - **L:** where the feature/ data is low
  - **T:** begin with a general trend statement about where the feature is.

### How to approach case studies

When you start to learn and/or revise a **case study** use the **5W's** to help.

- **What happened?** Recall key facts that are place specific to the location being studied. Try to describe what happened end using as many figures etc to support your points.
- **When did it happen?** Can you include the date of when it happened and if possible the time. The time in particular can help you explain severity of impacts when discussing hazards.
- **Where did it happen?** The geographical setting is very important. You need to be able to recall the country, region, town etc.
- **Why did it happen?** Why did the event happen? Why physical and /or human processes were operating to cause the event?
- **Who was affected by it happening?** Who was affected? How many people were involved? What is the wealth of the country and how could this have an influence? Students aiming for the higher grades will need to explore how the event was dealt with and what management has been put in place to limit the impacts in the future.

### How to revise

- **Short bursts of revision** (30-40 minutes) are most effective. Your concentration lapses after about an hour and you need to take a short break (5-10 minutes).
- Find a **quiet place to revise** - your bedroom, school, the library - and refuse to be interrupted or distracted.
- Make sure you don't just revise the subjects and topics you like. **Work on your weaker** ones as well.
- Make your own **revision notes** because you will remember what you have written down more easily. Stick key notes to cupboards or doors so you see them everyday.
- Rewrite the **key points of your revision notes**; read them out loud to yourself. We remember more than twice as much of what we say aloud than of what we merely read.
- **Use different techniques.** Make your own learning maps, use post-it notes to write key words on, create flash cards. Record your notes on tape and listen to them back on your Walkman. Ask friends and family to test you. Use highlighter pens to mark important points. Chant or make up a rap song.

- **Practise on past exam papers** or revision tests available on the web initially do one section at a time and progress to doing an entire paper against the clock.  
(<http://qualifications.pearson.com/en/qualifications/edexcel-gcses/geography-b-2016.html>)
- You will need help at some stage; ask parents, older brothers and sisters, teachers or friends. If there is a teacher with whom you get on well at school ask for their e-mail address so you can clarify points you are unsure of whilst on study leave. Use websites specifically designed for revision.
- **Don't get stressed out!** Eat properly and get lots of sleep!
- **Believe in yourself and be positive.** If you think you can succeed you will; if you convince yourself that you will fail, that's what will probably happen.

### Effective revision

To be effective, revision must be:

- **Active** - always work with a pen and paper, look for key points, test yourself. Never just sit down and read for a set period. Focus on tasks, not time. If you just read notes you'll only retain about 10% of the information.
- **Organised** - always ask yourself at the start of a revision session "what do I want to have completed in this session?" Have a plan for what you want to cover this week and this month. Have an overview of the priority areas in each subject.

### Learning Styles

Know how you learn best and then you can revise in ways that suit your style.

**Visual learners** prefer to:

- Draw pictures and diagrams
- Colour code their work
- Use different coloured paper, pens etc.
- Use their own system of symbols etc.
- Create images and scenes in their minds

**Auditory learners** prefer to:

- Say their work aloud
- Give presentations to an imaginary audience
- Record notes on a tape recorder
- Use silly noises to remember things
- Hear the information in their mind
- Play instrumental music

**Kinaesthetic learners** prefer to:

- Do actions when learning key facts
- Walk about when learning
- Find it harder to sit at a desk
- Add emotions and textures to exaggerate information
- Try to experience what they are learning

### Which strategies could you use to help you revise?

Try one of these.....

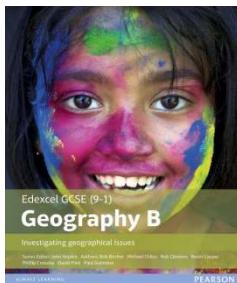
- **Mind maps:** Make mind-maps or association maps rather than taking linear notes. Mapping your notes by radiating key words out in a pattern of links from a central point will make best use of your memory. If you use colour and images on the maps, you'll be harnessing the power of both sides of your brain - creative and logical.

- **Read intelligently.** Spend five minutes flipping through a book or your notes looking at headings and summaries. Then attempt to mind map what you have spotted and what you can remember.
- **Use cards.** Write questions on one side and answers on the other. Then get your family to test you. Merely creating the cards will help your recall. You can also use them to test yourself when faced with 'dead' time at bus stops or waiting for someone.
- **Physical learning: Use the environment** Use a different room for each subject.
  - Notice aspects of the environment such as the light or feel of the room - how do you feel in that place?
  - Attach your notes to the furniture. Notice their location.
  - Associate a different location with each subject. Associate furniture, windows, plants and ornaments with particular topics.
- **Condense.** Fitting notes onto one side of paper makes them easier to stomach, so rewrite and cut down as you go.
- **Highlight.** Target key areas using colours and symbols. Visuals help you remember the facts.
- **Record.** Try putting important points, quotes and formulae on tape. If you hear them and read them, they're more likely to sink in.
- **Talk.** Read your notes out loud, it's one way of getting them to register.
- **Test.** See what you can remember without notes, but avoid testing yourself on subjects you know already. Why not ask someone else to test you?
- **Time.** Do past exam papers against the clock, it's an excellent way of getting up to speed and of checking where there are gaps in your knowledge.

## Review

- Looking over a topic every now and then will help to keep it in the memory, taking away the need to cram before exams.
- Make a summary of the work and look over it ten minutes later, the next day, the next week and then the next month for a few minutes each time. This reinforces the knowledge learned.
- Understanding increases as time spent studying passes. However, the ability to recall things being memorised becomes progressively less efficient as time passes in a study session.
- 20 minutes is needed for the mind to get into the rhythm of and flow of the material. Any more than 40 minutes spent memorising means that memory declines to a point where it is no longer valuable.
- The answer in revision lessons therefore is to do 30 minutes with a 5-minute stretch break and then review the topic.

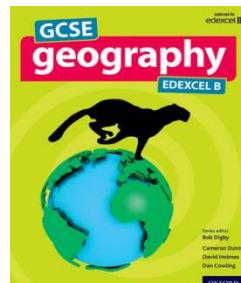
## Resources to support in Geography



**Price:** £24.99

**ISBN:** 9781446927762

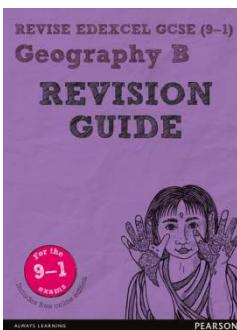
**Available:** June 2016



**Price:** £25.00

**ISBN:** 9780198366577

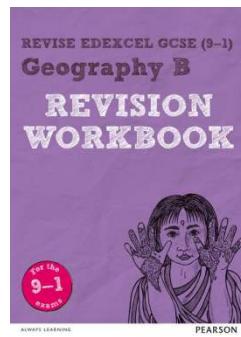
**Available:** May 2016



**Price:** £5.99

**ISBN:** 9781292133782

**Available:** Oct 2016



**Price:** £5.99

**ISBN:** 9781292133768

**Available:** Oct 2016

## Useful websites to support study at home

- <http://www.revisionworld.com/gcse-revision/geography>
- <http://www.gcsegeography.co.uk/home>
- <http://www.s-cool.co.uk/gcse/geography>
- <http://www.coolgeography.co.uk>
- <http://www.bbc.co.uk/schools/gcsebitesize/geography/>
- <http://www.geography.learnontheinternet.co.uk/gcse/>
- <http://qualifications.pearson.com/en/qualifications/edexcel-gcses/geography-b-2016.html>

## Command word in Geography

Exam papers will have clear and simple instructional text, so each student can understand what they're being asked to do.

**Gradual ramping of demand** throughout sections and papers motivates all students to engage with every part of the exams.

**Command words are used consistently** to assess particular skills, making it clear the type of response that is required.

	Marks					
	1	2	3	5	8	12
Identify	✓					
Define	✓					
Calculate	✓	✓				
Label	✓	✓	✓			
Draw		✓	✓			
Compare			✓			
Describe		✓	✓			
Explain		✓	✓	✓		
Suggest			✓	✓		
Examine					✓	
Assess					✓	
Evaluate					✓	
Discuss						✓
Justify						✓

**'Assess'** requires consideration of all factors identifying which are the most important

**'Evaluate'** requires reviewing of information and bringing it together to form an evidence based conclusion.

**'Discuss'** requires exploration of strengths and weaknesses of the different sides of an argument.

**'Justify'** will always be used for the synoptic question. Requires selecting one option and justifying the choice.

## Unpicking the command words

These words will form the basis of the variety exam questions that students will be asked. It is vital that students become familiar with these command words so that they are aware of what the exam question is asking them to do.

- **Identify/ State/ Name:** Recall or select one or more pieces of information.
- **Define:** State the meaning of a term.
- **Calculate:** Produce a numerical answer, showing relevant working.
- **Draw/ plot:** Create a geographical representation of geographical information.
- **Label:** Add a label/ labels to a given resource, graphic or image.
- **Describe:** Give an account of the main characteristics of something or the steps in a process. Statements in the response should be developed but do not need to include justification or reason.
- **Compare:** Find similarities and differences of two elements given in a question. Each response must relate to both elements, and must include a statement of their similarity/ difference.
- **Explain:** Provide a reasoned explanation of how or why something occurs. An explanation requires a justification/ exemplification of a point. Some questions will require the use of annotated diagrams to support explanation.

- **Suggest:** Apply understanding to provide a reasoned explanation of how or why something may occur. A suggested explanation requires a justification/ exemplification of a point.
- **Assess:** Use evidence to determine the relative significance of something. Give consideration to all factors and identify which are the most important.
- **Evaluate:** Measure the value or success of something and ultimately provide a substantiated judgement/ conclusion. Review information and then bring together to form a conclusion, drawing on evidence such as strengths, weaknesses, alternatives and relevant data.
- **Select...and justify:** Select one option from those given and justify the choice, drawing across the resources provided and knowledge/ understanding. The justification should include consideration of the alternative options in order to provide a supported argument in favour of the chosen option.

## General Key Terms: Content

The key terms below are terms that will be used across each topic, therefore it is important that your son/daughter is familiar with them so they are able to confidently embed them within their written responses.

- **Developing Country:** Country with low human development (LHD), a poor country
- **Emerging Country:** Country with high and medium human development (HMHD), recently emerging country.
- **Developed Country:** Country with a very high human development (VHHD)
- **Megacity:** Urban area with a population of over 10 million.
- **Major City:** City with a population of at least 200, 000 inhabitants.
- **Social:** People
- **Economic:** Money
- **Political:** Government and international relations
- **Environmental:** Components of the environment and the interactions of man with these.

## Topic terminology

Topic 1 Hazardous Earth	
Key Term	Definition
Aftershocks	Follow an earthquake as the fault 'settles' into its new position
Andesitic lava	A thick and sticky lava erupted from composite volcanoes.
Asthenosphere	Part of the Earth's mantle. It is a hot, semi-molten layer that lies beneath the tectonic plates.
Atmosphere	The layer of gases above the Earth's surface
Basalt	A dark-coloured volcanic rock. Molten basalt spreads rapidly and is widespread.
Carbon dating	Uses radioactive testing to find the age of rocks which contained living material.
Collision zone	Where two tectonic plates collide – forming mountains like the Himalayas.
Composite volcano	A steep-sided volcano that is made up of a variety of materials, such as lava and ash.
Conservative boundary	Where two tectonic plates slide past each other.
Continental crust	The part of the Earth's crust that makes up land, on average 30-50km thick.
Convection currents	Transfer heat from one part of a liquid or gas to another. In the Earth's mantle, the currents which rise from the Earth's core are strong enough to move the tectonic plates on the Earth's surface.
Convergent boundary	Where two tectonic plates come together.
Core	The central part of the Earth's structure, made up of a solid inner and liquid outer core.
Coriolis force	A strong force created by the Earth's rotation. It can cause storms, including hurricanes.
Dissipate	Means to reduce energy.
Distribution	The way something is spread out or arranged over a geographic area.
Divergent boundary	Where two tectonic plates move away from each other.
Effusive	A type of eruption where runny lava flows steadily out of a fissure or vent.
Epicentre	The point on the ground directly above the focus (centre) of an earthquake.
Evaporation	The changing of a liquid into vapour or gas.
Eye	The centre of a tropical cyclone; an area of clear conditions created by air converging at the centre of the storm and then sinking.

Fault	Large cracks caused by past tectonic movement.
Fissure	A crack in the Earth's crust which lava comes out of.
Focus	The point of origin of an earthquake.
Friction	The force which resists the movement of one surface over another.
Glacial	A cold period of time during which the Earth's glaciers expanded widely.
Global circulation model	A theory that explains how the atmosphere operates in a series of three cells each side of the equator.
Greenhouse effect	The way that gases in the atmosphere trap heat from the sun. Like the glass in a greenhouse – they let heat in, but prevent most of it from escaping.
Greenhouse gases	Gases like carbon dioxide and methane that trap heat around the Earth, leading to global warming.
Hot spot	Columns of heat in Earth's mantle found in the middle of a tectonic plate.
Interglacial	A long period of warmer conditions between glacials.
Inter-Tropical Convergence Zone (ITCZ)	A narrow zone of low pressure near the Equator where northern and southern air masses converge.
Landslide	A rapid mass movement of rock fragments and soil under the influence of gravity.
Latitude	How far north or south a location is from the Equator, measured in degrees.
Lava	Melted rock that erupts from a volcano.
Lava flows	Lava flows at different speeds, depending on what it is made of. Lava flows are normally very slow and not hazardous but, when mixed with water, can flow very fast and be dangerous.
Lithosphere	The uppermost layer of the Earth. It is cool and brittle. It includes the very top of the mantle and, above this, the crust.
Magma	Melted rock below the Earth's surface. When it reaches the surface it is called lava.
Magnitude	Of an Earthquake (how much the ground shakes), an expression of the total energy released.
Mantle	The middle layer of the Earth. It lies between the crust and the core and is about 2900km thick. Its outer layer is the asthenosphere. Below the asthenosphere it consists mainly of solid rock.
Milankovitch cycles (orbital change)	The three long-term cycles in the Earth's orbit around the sun.
Ocean currents	Permanent or semi-permanent large-scale horizontal movements of the ocean waters.
Oceanic crust	The part of the Earth' crust which is under the oceans, usually 6-8km thick.
Plate boundaries	Where tectonic plates meet. There are 3 kinds: divergent, convergent and conservative.
Plumes	Upwelling of molten rock through the asthenosphere to the lithosphere.
Primary effects	The immediate effects of a natural hazard, caused directly by it.
Pyroclastic flow	A lethal hot mixture of broken rocks and gases that races down the side of a volcano.
Quaternary	The last 2.6 million years, during which there have been many glacials.
Radioactive decay	The process where natural radioactive materials in the Earth's rocks break down, giving out energy and heat as they do.
Richter scale	A scale for measuring the magnitude of earthquakes.
Remote sensing	Using satellites or aerial photography to provide information on land use over large areas.
Saffir-Simpson Hurricane Scale	A scale that classifies hurricanes into five different categories according to their wind strength.
Secondary effects	The indirect impacts of an event , usually occurring in the hours, weeks,

	months or even years after the event.
Seismometer	A machine for recording and measuring an earthquake using the Richter scale.
Storm surge	A rapid rise in the level of the sea caused by low pressure and strong winds.
Subduction	Describes oceanic crust sinking into the mantle at a convergent plate boundary. As the crust subducts, it melts back into the mantle.
Tectonic hazards	Natural events caused by movement of the Earth's plates that affect people and property.
Tectonic plates	The Earth's surface is broken into large pieces, like a cracked eggshell. The pieces are called tectonic plates, or just plates.
Thermal expansion	As a result of heating, expansion occurs. When sea water warms up, it expands.
Track	The path followed by a tropical cyclone.
Tree rings	Marks on the inside of tree trunks that show individual growing seasons. The thickness of the rings varies depending on climatic conditions during the seasons.
Tropical cyclone	A weather system that forms over the ocean in tropical areas and can produce high winds and heavy rain.
Tsunami	Earthquakes beneath the sea bed generate huge waves that travel up to 900km/h.
Volcanic Explosivity Index (VEI)	Measures the explosiveness of volcanic eruptions on a scale of 1 to 8.

## Topic 2 Development dynamics

Key Term	Definition
Aid	Assistance in the form of grants or loans at below market rates.
Birth rate	The number of live births per 1000 population per year.
Bottom-up development	Experts work with communities to identify their needs, offer assistance and let people have more control over their lives, often run by NGOs.
Capitalism	The social and economic system which relies on the market mechanism to distribute the factors of production (land, labour, capital) in the most efficient way.
Colonialism	Acquiring control over another country, occupying it with settlers and exploiting it economically.
Colony	A country or region under the political control of another country and occupied by settlers from that country.
Communism	Is a system of government, based on the theories of Karl Marx, which believes in sharing wealth between all people.
Consumerism	An economy or society based on people consuming large amounts of goods and services.
Death rate	The number of deaths per 1000 population per year.
Debt	Money owed by a country to another country, to private creditors (e.g. commercial banks) or to international agencies such as the World Bank or IMF.
Demographic indicators	Measures related to the population, such as birth and death rate and rate of natural increase.
Demographic transition	A model of how countries' population structures often change over time as they develop.
Dependency theory	A theory which blames the relative underdevelopment of the developing world on exploitation by the developed world, first through colonialism and then by neo-colonialism.
Developed country	A country with very high human development.

Developing country	A country with low human development.
Development	The economic or social progress a country or people makes.
Development gap	The difference in income and the quality of life in general between the richest and poorest countries in the world.
Economic development	Improvements in a country's or people's employment, income and living standards.
Economic liberalisation	When a country's economy is given the freedom of a 'market economy', consumers and companies decide what people buy based on demand.
Emerging economies	Countries that have recently industrialised and are progressing towards an increased role in the world economy.
Fair trade	Farmers and producers in developing countries are given a fair deal by buyers in developed countries; prices paid are always higher than their costs of production.
Foreign direct investment (FDI)	Overseas investment in physical capital by transnational corporations.
Formal economy	Means one which is official, meets legal standards for accounts, taxes and workers' pay and conditions.
Free trade	The free flow of goods and services, without the restriction of tariffs.
Geopolitical influence	The way in which a country's geography and economy affects its relations with other countries.
Globalisation	Increased connections between countries.
Goods	Physical materials or products that are of value to us.
Green revolution	A 20 <sup>th</sup> century development where new varieties of crops and better technology led to dramatic increases in crop yields in some developing countries.
Gross domestic product (GDP)	The total value of goods and services produced by a country in one year.
Gross domestic product (GDP) per capita	The total value of goods and services produced by a country in a year per head of the population.
Gross National Income (GNI) per capita	The total income of the country, including that made outside the country by its companies and corporations, divided by the number of inhabitants, to give average income per person.
Human Development Index (HDI)	A standard means of measuring human development.
IGO	Inter-governmental organisation e.g. The UN.
Industrialisation	Where a mainly agricultural society changes and begins to depend on manufacturing industries instead.
Infant mortality rate	The number of deaths of infants under one year of age per 1000 live births per year.
Informal economy	Means an unofficial economy, where no records are kept. People in the informal economy have no contracts or employment rights.
Intermediate technology	Uses low-tech solutions using local materials, labour and expertise to solve problems.
International aid	The giving of resources (money, food, goods, technology) by one country or organisation to another poorer country.
Level of development	Means a country's wealth (measured by its GDP), and its social and political progress (e.g. its education, health care or democratic process in which everyone can vote freely).
Life expectancy	Average number of years that a newborn child can expect to live.
Maternal mortality rate	The annual number of deaths of women from pregnancy-related causes per 100,000 live births.

Neo-colonialism	The dominance of poor countries by rich countries, not by direct political control (as in colonialism) but by economic power and cultural influence.
Non-governmental organisation (NGO)	NGOs work to make life better, especially for the poor. Oxfam, the Red Cross and Greenpeace are all NGOs.
Outsourcing	Using people in other countries to provide services if they can do so more cheaply e.g. call centres.
Political development	Improvements in a country's system of government, or the involvement of the people, for example through greater democracy.
Population structure	The number of each sex in each age group (e.g. 10-14), usually displayed in a population pyramid diagram.
Poverty line	The minimum level of income required to meet a person's basic needs (US\$1.25).
Purchasing Power Parity (PPP)	Shows what you can buy in each country, now used to measure GDP.
Services	Functions that satisfy our needs.
Social development	Improvements in people's lives in health, education, culture.
Terms of trade	Means the value of a country's exports relative to that of its imports.
Top-down development	When decision making about the development of a place is done by the governments or large companies.
Total fertility rate	The average number of children born per woman in a country.
Transnational companies (TNCs)	Those which operate across more than one country.

### Topic Three Challenges of an Urbanising World

Key Term	Definition
Bottom-up development	Experts work with communities to identify their needs, offer assistance and let people have more control over their lives, often run by NGOs.
Brownfield sites	Former industrial areas that have been developed before.
Central Business District (CBD)	The heart of an urban area, often containing a high percentage of shops and offices.
Connectivity	How easy it is to travel or connect with other places.
Conurbation	A continuous urban or built-up area, formed by merging towns or cities.
Counter-urbanisation	When people leave towns and cities to live in the countryside.
Deindustrialisation	Decreased activity in manufacturing and closure of industries, leading to unemployment.
Formal economy	Means one which is official, meets legal standards for accounts, taxes and workers' pay and conditions.
Green belt	Undeveloped areas of land around the edge of cities with strict planning controls.
Informal economy	Means an unofficial economy, where no records are kept. People in the informal economy have no contracts or employment rights.
Infrastructure	The basic services needed for an industrial country to operate e.g. roads, railways, power and water supplies, waste disposal, schools, hospitals and communication services.
Megacity	A many centered, multi-city urban area of more than 10 million people. A megacity is sometimes formed from several cities merging together.
Migration	The movement of people from one area to another.
Multiplier effect	When people or businesses move into an area and invest money on housing and services, which in turn creates more jobs and attracts more people.

Natural increase	The birth rate minus the death rate for a place. It is normally given as a % of the total population.
Non-governmental organisation (NGO)	NGOs work to make life better, especially for the poor. Oxfam, the Red Cross and Greenpeace are all NGOs.
Primary industry	Using raw materials e.g. farming, mining or fishing.
Pull factor	Something that attracts someone to an area.
Push factor	Something that makes someone want to leave an area.
Quality of life	A measure of how 'wealthy' people are, but measured using criteria such as housing, employment and environmental factors, rather than income.
Quaternary industry	Research and development/ the knowledge sector.
Regeneration	Means re-developing former industrial areas or housing to improve them.
Re-urbanisation	When people who used to live in the city and then moved out to the country or to a suburb, move back and live in the city.
Rural-urban fringe	The area where a town or city meets the countryside
Rural-urban migration	The movement of people from the countryside to the cities, normally to escape from poverty and to search for work.
Secondary industry	Manufacturing products e.g. factory work or builders.
Site	The actual location of a settlement on the Earth.
Situation	The location of a place relative to its surroundings and other places.
Slum	A run-down and often over crowded urban area with poor quality housing and services.
Spatial	Means 'relating to space' e.g. the spatial growth of a city means how much extra space it takes up as it grows.
Suburbanisation	The movement of people from the inner suburbs to the outer suburbs.
Sustainable development	Defined as that which 'meets the needs of the present without compromising the ability of future generations to meet their own needs'.
Sustainable management	Meeting the needs of people now and in the future, and limiting harm to the environment.
Tertiary industry	The service sector e.g. teaching, nursing, shop assistants.
Top-down development	When decision making about the development of a place is done by the governments or large companies.
Urbanisation	Means a rise in the percentage of people living in urban areas compared with rural areas.

#### Topic 4 The UK's evolving physical landscape

Key Term	Definition
Abrasion (corrasion)	Erosion caused by the rubbing and scouring effect of material carried by the rivers/ sea.
Alluvium	All deposits laid down by rivers, especially in times of flood.
Antecedent rainfall	The amount of moisture already in the ground before a rainstorm.
Attrition	Process of erosion by which particles are reduced in size as they hit against each other.
Backwash	The movement of water down a beach by the action of gravity.
Bankfull	The discharge or contents of the river which is just contained within its banks. This is when the speed (or velocity) of the river is at its greatest.
Bar	An accumulation of sediment that grows across the mouth of a bay, caused by longshore drift.
Channel	Refers to the bed and banks of the river.
Concordant coasts	Follow the ridges and valleys of the land, so the rock strata is parallel to the coastline.
Confluence	The point at which a tributary joins the main river channel.
Constructive waves	Waves that build up beach material to create landforms.

Corrosion (solution)	Chemical reactions occur when slightly acid water dissolves calcium, breaking down rock such as limestone.
Delta	A low-lying area at the mouth of a river where a river deposits so much sediment it extends beyond the coastline.
Deposition	When a river loses energy and drops some or all of the material it is carrying.
Destructive waves	Waves that erode coastlines.
Discharge	The volume of water in the river at any given point (measured in cumecs).
Discordant coasts	Alternates between bands of hard rocks and soft rocks, so the rock strata is at right angles to the coast.
Drainage Basin	The area of land drained by a river and its tributaries.
Erosion	Means the wearing away of the landscape.
Estuary	Part of a river that is tidal.
Evaporation	When water changes to water vapour when the sun heats it.
Fetch	The length of water over which the wind has blown, affecting the size and strength of waves.
Flood plain	Flat land around a river that gets flooded when the river overflows.
Geology	The nature and structure of rocks- type of rock.
Groundwater flow	Movement of water underground through rocks.
Hard engineering	Building physical structures to deal with natural hazards, such as sea walls to stop waves.
Holistic management	Takes into account all social, economic and environmental costs and benefits. In coastal management this means looking at the coastline as a whole instead of an individual bay or beach.
Hydraulic action	The power of moving water being forced against the banks causes them to collapse and be washed away.
Impermeable	A surface that does not allow water to pass through it.
Infiltration	When surface water soaks down into the soil.
Interception	When water droplets collect on trees and plants.
Interlocking spurs	Hills that stick out on alternate sides of a V-shaped valley, like the teeth of a zip.
Longshore drift	The movement of material along a coastline by the action of the waves.
Mass movement	The movement of material downslope, such as rock falls, cliff collapse or landslides.
Mouth	Where a river enters the sea.
Percolation	Water moving downwards through the soil into the rocks below.
Permeable	A surface that allows water to pass through it.
Precipitation	Moisture that falls from the atmosphere e.g. rain, hail, sleet or snow.
Prevailing wind	The most frequent wind direction.
Salt marsh	Salt-tolerant vegetation growing on mud flats in bays or estuaries. These plants trap sediments which gradually raise the height of the marsh. Eventually it becomes part of the coast.
Saltation	Process of transport by which small particles bounce along the bed.
Saturated	Soil is saturated when the water table has come to the surface. The water then flows overland.
Scree	Angular pieces of rock created by freeze-thaw.
Shoreline Management Plan (SMP)	This is an approach which builds on knowledge of the coastal environment and takes account of the wide range of public interest to avoid piecemeal attempts to protect one area at the expense of another.
Soft engineering	Involves adapting to natural hazards and working with nature to limit damage.
Soil creep	The slow gradual movement downslope of soil, scree or glacier ice.

Solution	Process of transport by which material is carried dissolved in the water
Source	The start of a river.
Spit	A ridge of sand running away from the coast, usually with a curved seaward end.
Storm hydrograph	A graph which shows the change in both rainfall and discharge from a river following a storm.
Strata	Distinctive layers of rock.
Sub-aerial processes	Occurring on land, at the Earth's surface, as opposed to underwater or underground.
Surface runoff	All water flowing on the Earth's surface.
Suspension	Process of transport by which material is carried along within the water.
Swash	The force of breaking waves moving up a beach.
Topography	The shape and physical features of an area.
Traction	Larger fragments rolled along the river bed.
Transpiration	Water vapour released by trees and plants.
Tributary	A small river feeding into a large river.
Velocity	The speed of a river, measured in metres per second.
Weathering	The physical, chemical or biological breakdown of solid rock by the action of weather (e.g. frost, rain) or plants.
Watershed	The boundary between two drainage basins (a ridge of high land).

### Topic 5 The UK's evolving human landscape

Key Term	Definition
Affluence	Great wealth or abundance.
Brownfield sites	Former industrial areas that have been developed before.
Central Business District (CBD)	The heart of an urban area, often containing a high percentage of shops and offices.
Connectivity	How easy it is to travel or connect with other places.
Conurbation	A continuous urban or built-up area, formed by merging towns or cities.
Decentralisation	Shift of shopping activity and employment away from the CBD.
Deindustrialisation	Decreased activity in manufacturing and closure of industries, leading to unemployment.
Depopulation	Decline in the total population of an area.
Deprivation	Lack of wealth and services. It usually means low standards of living caused by low income, poor health and low educational qualifications.
Diversification	When a business (e.g. a farm) decides to sell other products or services in order to survive or grow.
Economic core	The centre of a country or region economically, where businesses thrive, people have opportunities and are relatively wealthy; a highly developed area.
Economic periphery	The edge of a country or region in terms of economics; a more remote, difficult area where people tend to be poorer and have fewer opportunities; a less well developed area.
Free trade	The free flow of goods and services without the restriction of tariffs.
Foreign Direct Investment (FDI)	Overseas investment in physical capital by transnational corporations.
Gentrification	High-income earners move into run-down areas to be closer to their workplace, often resulting in the rehabilitation and regeneration of the area to conform with middle class lifestyles.
Globalisation	Increased connections between countries.
Goods	Physical materials or products that are of value to us.
Green belt	Undeveloped areas of land around the edge of cities with strict planning

	controls.
Gross domestic product (GDP)	The total value of goods and services produced by a country in one year.
Index of Multiple Deprivation (IMD)	Means of showing how deprived some areas are.
Migration	Movement of people from one place to another.
Multicultural	A variety of different cultures of ethnic groups within a society.
Northern powerhouse	A major core region of cities (with a similar population to London) that has the potential to drive the economy of northern England.
Population density	The average number of people in a given area, expressed as people per km <sup>2</sup> .
Population structure	The number of each sex in each age group (e.g. 10-14), usually displayed in a population pyramid.
Privatisation	The sale of state owned assets to the private sector.
Quality of life	A measure of how 'wealthy' people are, but measured using criteria such as housing, employment and environmental factors, rather than income.
Rebranded	A change of image.
Regeneration	Means re-developing former industrial areas or housing to improve them.
Rural-urban fringe	The area where a town or city meets the countryside.
Services	Functions that satisfy our needs.
Studentification	Communities benefit from local universities which provide employment opportunities and a large student population which can regenerate pubs, shops and buy-to-let properties.
Terms of trade	Means the value of a country's exports relative to that of its imports.
Transnational companies (TNCs)	Those which operate across more than one country e.g. Apple, Nike, Microsoft etc.

### Topic 6 Geographical Investigations

Key Term	Definition
Accurate	Results are as near as possible to the true answer - they have few errors.
Enquiry	The process of investigation to find an answer to a question.
Fieldwork	Means work carried out in the outdoors.
Mean	The sum of the data values divided by their number, often called the average.
Median	The middle value when a set of values in a data set is written in order.
Mode	The most frequent value in a data set.
Qualitative	Data without numbers based on people's opinions or ideas, for example an interview or field sketch.
Quantitative	Data which contains numbers and figures, for example a pedestrian count.
Random sampling	Where samples are chosen at random e.g. picking pebbles on a beach.
Range	The difference between the smallest and biggest values.
Ratio	Shows the number of times one value occurs compared with another.
Reliable	Means that data can be reproduced.
Stratified sampling	Where you choose samples from different groups to get a good overall representation. This type of sampling is useful when you need to collect people's perceptions, e.g. of pollution in their area, and need to ask people of different ages.
Systematic sampling	Where samples are chosen at regular intervals – this is useful in places where what you want to investigate changes frequently e.g. the number of pedestrians in an area.
Valid	Means that the data answer the original question and is reliable.

**Topic 7 People and the biosphere**

<b>Key Term</b>	<b>Definition</b>
Abiotic	Non-living part of a biome, includes the atmosphere, water, rock and soil.
Affluence	Great wealth or abundance.
Afforestation	The planting of trees where there were none before, or they had been cut down.
Altitudinal zonation	Is the change in ecosystems at different altitudes, caused by alterations in temperature, precipitation, sunlight and soil type.
Atmosphere	The layer of gases above the Earth's surface.
Biodiversity	Means the number of different plants and animal species in an area.
Biome	A large-scale ecosystem e.g. tropical rainforest.
Biosphere	The living layer of the Earth between the lithosphere and atmosphere.
Biotic	Living part of a biome, made up of plant (flora) and animal (fauna) life.
Deforestation	The deliberate cutting down of forests to exploit forest resources (timber, land or minerals).
Ecosystem	A localised biome made up of living things and their non-living environment. For example, a pond, a forest, a desert.
Ecosystem services	A collective term for all the ways humans benefit from ecosystems.
Ecosystem stress	Factors, which can be natural or human-produced, which put pressure on ecosystem productivity and processes; ecosystems can tolerate some changes but if the change is too big, or goes on too long, then damage starts to occur.
Fauna	Animals
Flora	Plants
Hydrological cycle	The movement of water between its different forms; gas (water vapour), liquid and solid (ice) forms. It is also known as the water cycle.
Indigenous people	Are the original people of a region. Some indigenous groups still lead traditional lifestyles e.g. a tribal system, hunting for food.
Natural resources	Are materials found in the environment that are used by humans, including land, water, fossil fuels, rocks and minerals and biological resources like timber and fish.

**Topic 8 Forests under threat (tropical rainforest and taiga [boreal] forest)**

<b>Key Term</b>	<b>Definition</b>
Acid precipitation	Also called acid rain. When industrial air pollution causes water vapour in the atmosphere to become acidic and fall as acid precipitation.
Arable	The farming of crops like wheat and barley.
Biofuel	Is made from plant oils and waste materials and can be used to power diesel vehicles and generate electricity.
Biomass	The mass (weight) of all the living things in an ecosystem.
Boreal	A type of forest found in high northern latitudes, also called taiga.
Canopy	The continuous layer of tall trees which shades the forest floor.
Carbon sinks	Natural stores for carbon-containing chemical compounds, like carbon dioxide or methane.
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora.
Commercial agriculture	Farming in which crops are grown for sale.
Coniferous	Having needle instead of leaves: most coniferous trees have cones and are evergreen.
Conservation	Means protecting threatened biomes e.g. setting up national parks or banning trade in endangered species.

Deciduous	Having leaves that fall off in the autumn and grow again in spring.
Deforestation	The deliberate cutting down of forests to exploit forest resources (timber, land or minerals).
Direct threat	When there is a direct cause between one thing happening and damage being caused to something else.
Emergent	Very high trees that grow another ten metres or more above the tropical rainforest canopy.
Equatorial climate	The constantly hot and wet climate of regions near the Equator.
Food web	A complex network of overlapping food chains that connect plants and animals in biomes.
Fossil fuels	A natural fuel found underground, buried within sedimentary rock in the form of coal, oil or natural gas.
Hydro-electric power (HEP)	The use of fast flowing water to turn turbines which produce electricity.
Indirect threat	When there is not a direct cause between one thing happening and another thing being damaged.
Invasive species	(or alien species) Is a plant, animal or disease introduced from one area to another which causes ecosystem damage.
Leaching	When minerals are washed downwards through the soil by rainwater.
Net primary productivity (NPP)	A measure of how much new plant and animal growth is added to a biome each year.
Nutrient	Mineral or chemical that plants and animals need to grow.
Nutrient cycle	Nutrients move between the biomass, litter and soil as part of a continuous cycle which keeps both plants and soil healthy.
REDD	Reducing Emissions from Deforestation and Forest Degradation.
Subsistence farming	Where farmers grow food to feed their families, rather than to sell.
Sustainable forestry	When trees are cut down for timber and they are replaced by new trees, ideally with species that are naturally part of that ecosystem rather than non-native species.
Sustainable management	Planning ahead and controlling development for a long future.
Wildfire	Uncontrolled burning through forest, grassland or scrub. Such fires can 'jump' roads and rivers and travel at high speed.

### Topic 9 Consuming energy resources

Key Term	Definition
Biofuels	Any kind of fuel made from living things, or from the waste they produce.
Black gold	A term used for oil, as it is regarded as such a valuable commodity.
Carbon footprint	A calculation of the total greenhouse gas emissions caused by a person, a country, an organisation, event or product.
Combined heat and power (CHP) generator	An efficient method of generating electricity and using the heat from the process.
Energy diversification	Getting energy from a variety of different sources to increase energy security.
Energy security	Having access to reliable and affordable sources of energy.
Flow resource	Resources such as wind, HEP or tidal energy that is used as it occurs and then replaced.
Fossil fuels	A natural fuel found underground, buried within sedimentary rock in the form of coal, oil or natural gas.
Fracking	A process that involves drilling down into the Earth and using a high-pressure

	water mixture to release gas trapped inside rock.
Geothermal	Heat from inside the Earth.
Greenhouse gases	Gases like carbon dioxide and methane that trap heat around the Earth, leading to global warming.
Hydro-electric power (HEP)	The use of fast flowing water to turn turbines which produce electricity.
Natural resources	Are materials found in the environment that are used by humans, including land, water, fossil fuels, rocks and minerals and biological resources like timber and fish.
Non-renewable energy	Sources that are finite and will eventually run out, such as oil and gas.
Organisation of Petroleum Exporting Countries (OPEC)	Established to regulate the global oil market, stabilise prices and ensure a fair return for its 12 member states who supply 45% of the world's oil.
Peak oil	The theoretical point at which half of the known reserves of oil in the world have been used.
Recyclable	Energy resources, such as biofuels and nuclear, that can be reused, so will last into the future.
Renewable	A resource that does not run out and can be restored, such as wind or solar.
Reserve	The estimated amount of resources left which can be extracted.
Stock resource	A non-renewable resource like coal that can be used only once, so will eventually run out.
Strip mining	(or open-pit, opencast or surface mining) involves digging large holes in the ground to extract ores and minerals that are close to the surface.
Tar sands	Sediment that is mixed with oil, can be mined to extract oil to be used as fuel.