Pearson Edexcel

GCSE (9-1) Geography B

Building confidence in geographical language and key terminology: a teacher guide.

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Introduction

This guide is designed to support teachers with the requirements for subject language and the overall fluency of students at GCSE.

Breaking down command words, exam-style questions, language and key terminology can help prepare students for the different requirements within the examination paper.

Feedback from 2018 and 2019 series suggest that some students need further guidance with both interpreting exam question language and knowledge-based questions.

An example of this from a question in 2018 was: ‘Explain one way in which topography affects economic development’. Not only were candidates expected to know what ‘topography’ means, but they were also expected to be able to interpret the words ‘affect’ and ‘economic’.

This guide will cover:

- exam question language
- classroom strategies to support geographical language
- important key terms and their definitions
- approaches to answering exam-style questions.

This guide should be used alongside the specification and the following qualification support materials:

- Getting Started guide
- Detailed GCSE Geography Assessment guide
- Command Words infographic.

Exam Question Language

Within exam questions there are number of words or phrases used by examiners that your students need to be aware of.

The table identifies and defines some of the more common language used in exam-style questions that should be shared with students.

Affects	To have an influence on.
Benefit	An advantage something will bring.
Cost	A disadvantage something will bring.
Challenges	Barriers/obstacles to something.
Characteristic	A point or feature of something.
Distribution	The location or pattern of something.
Economic	Financial or monetary.
Emerging country	A country with a medium/rapid level of development.
Factor	A reason or issue.
Feature	A quality or characteristic of something.
Impact	The effect on something.
Importance	Significance of something.
Influence	Affects or changes something.
Landform	A natural feature of Earth's surface.
Role	The part that somethings plays.
Significance	The importance of something.
Social	Public or people.
Strategies	Plans or schemes.

Classroom Strategies To Support Geographical Language

The demands on subject language are greater than ever. There are a few successful strategies that can be used to support students' retention and retrieval of geographical vocabulary.

- **Word walls** – either in student exercise books and/or on a display board in the classroom, add key words to a word wall. The constant exposure to subject specific language will encourage us all to us it more often.

- **Low-stake quizzes** – frequently deploy short 5-10 question quizzes on key terminology, not just from the most recently taught content. It is important to trigger the short-, medium- and long-term memory, excellent for retention and retrieval.

- **Student speak glossaries** – encourage students to keep a glossary either in the back of their exercise books or in a smaller vocabulary exercise book. This is a quick win for homework and prepares students for those low stake quizzes.

- **Flash cards** – an old favourite that could be used as an alternative glossary of terms. Students could make these as you go through each topic, building them up as they go along.

- **Subject fluency** – do not 'water down' vocabulary in lessons. Use geographical language in the classroom and encourage students to ask questions when they don't understand what something means.

- **Distinguish between** – ask students to distinguish the difference between a pair of key terms such as a 'shield' and 'composite volcano'.

- **KS3** - embed key terminology into KS3 programmes of study exposing students to the demands of subject language sooner rather than later.

- **Multiple choice** – use multiple choice questions to address misconceptions. There should be two definitive incorrect choices and another that is close to the truth that promotes thinking.

Important Key Terms and Their Definitions

This section identifies key terminology from the specification – students should be able to define these terms and, in some cases, be able to demonstrate an understanding of the process or processes associated with them.

The list is not definitive, and teachers should ensure that all aspects of the specification are covered; these are just some of the terms students should know and understand in order to be prepared for the examinations.

Paper 1: Global Geographical Issues

Hazardous Earth		
	Understanding the process(es)	**Definition**
Atmospheric circulation	Y	The movement of air within the Polar, Ferrel and Hadley Cells controlled by radiation from the sun.
Asthenosphere		The upper layer of Earth's mantle below the lithosphere.
Conservative boundary		Convection currents cause tectonic plates to slide past each other e.g. Haiti.
Convergent plate boundary		Where two plates are moving towards each other, resulting in the oceanic plate subducting e.g. Japan.
Divergent boundary		Where two plates are moving apart e.g. Iceland.
Enhanced greenhouse effect	Y	The trapping of heat radiation around the Earth by excess greenhouse gases produced through human activity.
Explosivity	Y	A measure of the relative explosiveness of volcanic eruptions varying due to formation on convergent or divergent boundaries.
Greenhouse gases		Human activities such as energy, industry, transport and farming that produce greenhouse gases e.g. carbon dioxide and methane.
High pressure		The 'weight' of sinking air exerts more pressure on the ground and an area of high pressure is formed causing areas to become arid.
Lithosphere		Includes both the crust and the top layer of the upper mantle.
Low pressure		The warmth of the Earth's surface causes air to rise, exerting less pressure on the ground forming low pressure causing rainfall.
Natural climate change	Y	Natural changes to Earth's climate caused by Milankovitch cycles, solar variation, volcanism and surface impact.

Past climate change		Points in Earth's history that have been comparatively warmer and significantly colder owing to natural causes.
Satellite technology		Allows huge areas of ocean to be monitored for the distinct tropical storm cloud formations.
Short-term relief		Immediate support that includes rescuing people, providing medical aid, and restoring water and electricity.
Storm surges		A tropical cyclone creates a large area of low pressure, which allows the level of the sea to rise.
Tropical cyclones		Large-scale, rotating storms that form over oceans (26.5°C) in tropical areas. They are also known as hurricanes and typhoons.
Warning strategies		Forecasting, monitoring and prediction that allows advance warnings for preparation and evacuation.

Tip: ensure previous terminology such as *constructive, destructive* and *relief* are replaced with the respective specification terminology of *divergent, convergent* and *topography*.

Development dynamics		
	Understanding the process(es)	**Definition**
Bottom-up		Projects that involve local people and communities in decision-making, often involving small-scale projects for the poorest.
Colonialism	Y	Control over another country and exploiting it economically. Occurred mainly in the 18th and 19th centuries.
Frank (dependency theory)	Y	A socialist view that explains how the core (developed countries) exploit the periphery (developing countries).
Fertility rate		The average number of children born to a woman in her lifetime.
Globalisation	Y	The increasing interconnectedness and interdependence of the world economically, culturally and politically.
Gross Domestic Product (per capita)		The total value of goods and services produced in a year by a country (divided by the population).
Inter-governmental organisation (IGO)		A group of countries established by a treaty such as the World Bank or United Nations.
Non-governmental		A private organisation, which is distinct from governmental agencies that works to make life better for the poor e.g. Oxfam.

organisation (NGO)		
Measures of inequality		Economic, social and political measures that show disparities between countries such as GDP, life expectancy and corruption.
Neo-colonialism	Y	The dominance of poor countries by rich countries, not by direct political control, but by economic power and cultural influence.
Rostow (modernisation theory)	Y	A view that suggests countries move through five stages of economic development.
Trans-national corporations (TNCs)		A firm that owns or controls productive operations in more than one country through foreign direct investment.
Top-down	Y	Where decisions are made by governments or large companies with little consultation; often large-scale and expensive.
Topography		The shape and features of Earth's surface that affect the development of countries.
Development dynamics – emerging country example (case study)		
Connectivity		Improved connections with the rest of the world owing to globalisation.
Foreign direct investment (FDI)	Y	Overseas investment of capital by transnational companies.
Geopolitical influence	Y	When a country becomes a major international player in the world market having established good trading relationships.
Gross national income (GNI per capita)		The total income of the country, including that made outside the country by its companies, divided by the number of people.
Infrastructure (investment)		Money spent on services such as roads and power supplies which are needed to keep a country running.
Multilateral aid	Y	Aid provided by a group of countries or an institution such as the World Bank to a poor country to fund development.
Site		The actual location of a settlement on the Earth, composed of the physical characteristics of the landscape.
Situation		The location of a place relative to its surroundings and other places.
Tied aid	Y	Money that a rich country lends to a poor country on the condition that the poor country spends the money on goods and services from the rich country.

Challenges of an Urbanising World		
	Understanding the process(es)	**Definition**
Counter-urbanisation		The movement of people from major cities to smaller settlements.
Formal employment		Official work that is taxed with contacts and job security.
Informal employment		Unofficial work (no taxes), often 'cash-in-hand' with no contract or job security.
Megacities		Cities with over 10 million people.
Planning regulations	Y	Decisions made by local government that determine what developments can take place when and where.
Suburbanisation		The outward spread of the built-up area.
Urbanisation	Y	The increase in the percentage of people living in towns and cities.
Challenges of an urbanising world – emerging country (megacity) example (case study)		
Bottom-up (urban context)	Y	Projects in urban areas that involve local people and communities in decision-making, often involving small-scale projects for the poorest e.g. LSS in Mumbai.
Connectivity		Improved connections with the rest of the world owing to globalisation.
Natural increase		The birth rate minus the death rate for a place. It is normally given as a % of the total population.
Migration		The internal (rural-urban) and international (country to country) movement of people.
Non-governmental organisation (NGO)		A private organisation, which is distinct from governmental agencies that works to make life better for the poor through community led activities e.g. WaterAid.
Site		The actual location of a settlement on the Earth, composed of the physical characteristics of the landscape.
Situation		The location of a place relative to its surroundings and other places.
Spatial growth (patterns)	Y	How much extra space a city takes up as it grows.
Squatter/slum settlements		Poor quality, illegal housing made from scrap materials that are often found on the outskirts of developing country cities.
Top-down (urban context)	Y	Where decisions are made by governments or large companies in urban areas with little consultation; often large-scale and expensive e.g. 'Vision Mumbai'.
Urban land-use	Y	What land is used for.

Urban structure		The location of the central business district (CBD), high and lower quality housing, and squatter settlements within a city.

Understanding the process
As defined above, urbanisation is the increase in the percentage of people living in towns and cities. As a process it is linked to industrialisation. As countries develop, services such as transport and access to safe water attract migrant workers to towns and cities. As towns and cities become increasingly more urbanised, more factories are built attracting more rural migrants to fill the jobs created.

This is a good example to use with students to emphasise the difference between *definition* and *process*.

Paper 2: UK Geographical Issues

The UK's evolving physical landscape		
	Understanding the process(es)	**Definition**
Antecedent conditions		Conditions in drainage basin in the period before a rainfall event such as saturated ground from previous rainfall.
Concordant		When a rock type runs parallel to the coastline.
Discordant		Where bands of hard and soft rock lie at right angles to the coastline forming headlands and bays.
Drainage basin (shape)		The area of land drained by a river and its tributaries.
Erosion	Y	The action of water wearing away rocks. There are four key erosion processes – hydraulic action, abrasion, solution and attrition.
Faults	Y	A fracture or break in rocks caused by tectonic activity.
Floodplain	Y	The flat land on the valley floor each side of a river channel, which sometimes floods.
Geological structure	Y	Geologic structures are usually the result of the tectonic forces that occur within the Earth. These forces fold and break rocks, form deep faults, and build mountains.
Igneous rock		Created by volcanic activity when magma or lava cools, forming rocks made of crystals that are usually hard e.g. granite.
Joints	Y	A vertical crack within a layer of rock formed as rock cools during the metamorphic process.
Landscapes (not landforms)	Y	UK upland landscapes (mountains) that are formed of harder, resistant rocks and UK lowland landscapes (hills) formed from younger, sedimentary rocks, which are less resistant.
Metamorphic rock		Existing rocks that have been changed by extreme pressure or heat. They are usually comprised of layers or bands of crystals and are very hard e.g. slate (which is compressed shale).
Past tectonic processes	Y	Previous active volcanoes, and plate movements that have caused massive folds and faults in the rocks. These processes have helped shape the geology and landscapes today.
Replenishment		The adding of sand or shingle to widen or improve a beach.
Seasonality		Regular changes of climatic conditions annually.
Sedimentary rock		Rock formed of small particles that have been eroded, transported, and deposited in layers or

		from the remains of dead plants and animals e.g. limestone.
Slope processes	Y	The downslope movement of rocks and soil under the influence of gravity that include rock falls, slumping and sliding.
Slope stabilisation	Y	A technique used to prevent cliffs from slumping and to reduce erosion. Often involves installing drains to remove groundwater reducing the risk of slumping.
Strategic realignment		The planned movement of the coastline inland because it can no longer be protected, also known as managed retreat.
Sub-aerial		Processes acting on the Earth's surface, including weathering and mass movement (e.g. slumping).
Weathering	Y	The breakdown and decay of rock by natural processes (physical, biological and chemical) acting on rocks, cliffs and valley sides.

Tip: use diagrams to support the retention of the different erosional, weathering and slope processes.

The UK's Evolving Human Landscape		
	Understanding the process(es)	**Definition**
Employment sectors		Primary – the extraction of raw materials from the land or sea. Secondary – manufacturing goods from the raw materials. Tertiary – providing a service to other people. Quaternary – involves research and development (highly skilled).
Enterprise zones	Y	Offer government grants and fewer planning regulations to stimulate business and create more jobs.
Ethnic and cultural diversity		When migrants introduce their home culture, for example, cuisine and religious practices in the host city.
Free trade	Y	Trade without tariffs or import duties allowing businesses to take part in international trade to increase their profits.
Immigration policies	Y	When a government encourages or reduces the need for immigration responding to the need for labour.
Policies (UK & EU)		UK – Enterprise zones that offer grants and fewer planning restrictions to promote business and create more jobs.

		EU – European Regional Development Funds that support UK regions by economic regeneration and improved communications.
Privatisation	Y	The sale of state-owned assets to the private sector to increase FDI and competition.
Trans-national corporations (TNCs)	Y	Transnational corporations are large companies that operate in a range of other countries. They are powerful players in the global economy, and they link national economies in different parts of the world.
Urban core		Comprises of offices and retail, a high population density of mostly young adults where property prices are expensive.

Fieldwork vocabulary
Fieldwork vocabulary mustn't be overlooked. There are 36-marks available across the familiar and unfamiliar fieldwork questions. Two common misconceptions are between reliability and accuracy, and site and location.

Questions referencing sampling of data collection can be poorly answered in exams by some students.

Geographical Investigations	
	Definition
Accuracy	This will be down to how the data was collected. It will be affected by human error, quality of the equipment used and the method itself e.g. using a floating object versus a flow metre to measure velocity.
Correlation	Is when two sets of variable data are linked.
Discharge	The amount of water flowing in a river, made up of its volume and speed, and measured in cubic metres per second (cumecs).
Environmental quality	Characteristics of the environment, such as litter and greenery, that are usually measured using an environmental quality survey (EQS).
Flood risk	Places at risk from flooding owing to changes in weather patterns caused by climate change, rising sea levels and storm surges.
Gradient	The steepness/angle of a slope.
Hypothesis	An idea (not a question) that you can study through an investigation.
Location	This is the place where the fieldwork was carried out. It is likely to be a wide area i.e. a town, village, a river of coastal area.
Primary data	Data collected first-hand.
Qualitative data	Data without numbers based on people's opinions or ideas, for example an interview or field sketch.
Quantitative data	Data which contains numbers and figures, for example a pedestrian count.
Questionnaire	A series of structured questions for the purpose of gathering data to support an investigation.
Random sampling	Data that is collected by chance.

Reliability	Trustworthiness of results. This will be affected by the sampling method (and size) and is down to how representative the data collected is.
Random sampling	Data that is collected by chance.
Risk assessment	A method where hazards are identified, and suitable precautions are taken to minimise risk to people.
Secondary data	Data that has already been collected and published.
Sediment	Material such as mud, sand and pebbles carried and deposited by rivers or waves.
Site	The actual location of a settlement on Earth, composed of the physical characteristics of the landscape specific to the area.
Suitability	The quality of being appropriate for a particular purpose.
Stratified sampling	Data that is collected from different parts of a population, for example different age groups.
Systematic sampling	Data that is collected at regular intervals, for example every 500 metres.
Theory	A group of linked ideas intended to explain an assumption.
Velocity	The speed at which a river flows; river velocity is often measured in metres per second.

Tip: ensure sampling techniques form part of the methods, and accuracy and reliability are embedded in students' evaluation of their geographical investigations.

Paper 3: People and Environment Issues - Making Geographical Decisions

People and the Biosphere		
	Understanding the process(es)	**Definition**
Abiotic		The non-living parts of an ecosystem.
Biome		A world-scale ecosystem e.g. the tropical rainforest.
Biotic		The living parts of an ecosystem.
Boserup – theory	Y	A theory that as the population size approaches the point when food and resources may run out, then human ingenuity will find a way of increasing production.
Hydrological cycle	Y	The movement of water between its different forms; gas (water vapour), liquid and solid forms. It is also known as the water cycle.
Indigenous people		The original human inhabitants of an area such as the rainforest that still rely on the biosphere goods such as food and medicine.
Malthus - theory	Y	A theory that human population would grow faster than food or resources supply, and a disaster would then take place.
Resources (natural)		Materials that are found in the environment that are used by humans, including land, water, fossils fuels, rocks and minerals and biological resources like timber and fish.

Forests under Threat		
	Understanding the process(es)	**Definition**
Acid precipitation		When industrial air pollution causes water vapour in the atmosphere to become acidic and fall as acid precipitation.
Ecosystem stress		Factors that put parts of the biosphere under pressure such climate change affecting the rainforest and plant species unable to adapt to hotter and drier conditions.
Ecotourism		Tourism that helps local communities and minimises damage on the environment.
Global actions	Y	International organisations that try to create agreements to protect aspects of the biosphere such as CITES and REDD.
Nutrient cycling	Y	The transfer of nutrients around different parts of an ecosystem.

Productivity (of ecosystems)		The productivity of an ecosystem is a measure of its biomass (all its biotic components). These differences are largely due to climate.
Sustainable (forest) management	Y	Aims to prevent damage to forests in a way that helps benefit local people.
Sustainable forestry		Able to continue without causing damage to the environment.

Consuming Energy Resources		
	Understanding the process(es)	**Definition**
Affluence		Greater wealth or abundance.
Biofuels		Fuel made from plant oils to power diesel vehicles.
Carbon footprints	Y	Measurement of all the greenhouse gases as individual produces expressed as tonnes (or kg) of carbon dioxide equivalent.
Conventional oil and gas		Where gas and oil are extracted from accessible gas and oil fields.
Ecologically sensitive areas		Fragile ecosystems that are at risk from contamination from gas and oil extraction.
Energy security	Y	Access to affordable and reliable sources of energy. Countries such as Russia and Canada, with surplus energy, are energy secure.
Environmental groups		NGOs like Greenpeace that have strong views on energy futures, arguing for a more sustainable approach to energy consumption.
Fracking		Drilling into Earth using high-pressure water to release gas trapped inside rocks.
Landscape scarring		Damage to the landscape caused by human activity such as mining,
Non-renewable		Energy that cannot reproduced such as coal, oil and natural gas.
Recyclable energy		Energy resources, including biofuels and nuclear, that can be reused, so will last into the future.
Renewable		A natural source of power that will never run out.
Unconventional oil and gas		Where gas and oil are less accessible and requires an alternative approach to extraction such as fracking.

Supporting Students with Exam Questions

The following three strategies are amongst the most common and successful strategies used by teachers to support their students when deconstructing exam questions.

1. 'De-bugging' the question
To support students in answering exam questions they should be encouraged to 'de-bug' the question.

This simple strategy is to **b**ox the command word, **u**nderline the key components and **g**o back over the question as the example below illustrates:

Explain

why some areas are more vulnerable to the impacts of tropical cyclones than others.

2. BLT
With extended 'explain' questions, students should remember the acronym BLT, '**b**ecause', **l**eading to' and '**t**herefore'. This will help them develop their responses. For example*, shield volcanoes are less steep because the lava is hot and runny leading to it spreading further, therefore forming shallow sided volcanoes.*

3. PEEL
PEEL paragraphs work well in geography for 8-mark questions. Students should make their **p**oint, use **e**vidence/**e**xemplification to support, explain their **p**oint and **l**ink back to the question. For example, *the most significant social impact of the 2011 Japan earthquake was the secondary effect of the tsunami. Approximately 20 000 people drowned as a result of the 10m high wave that crashed into the north east of Japan. Half a million people were also made homeless are houses were destroyed by the wall of water. This clearly demonstrates that the tsunami was the most severe social impact.*

Command words

Students must be aware of what the different command words require.

The definitions of the command words in the table below have been lifted and simplified for students from the specification.

These are the only command words that will be used in questions and will stay the same for the lifetime of the qualification.

Identify/State/Name	Recall or select one or more piece(s) of information.
Define	State the meaning of the term.
Calculate	Produce a numerical working, showing the relevant working if asked.
Draw/plot	Create a graphical representation of geographical information.
Label	Add a label to a resource, graphic or image.
Describe	Give an account of the main characteristics of something or the steps in a process.
Compare	Find the similarities and differences of two elements given in a question. Responses must relate to both elements and 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.
Suggest	Apply understanding to provide a reasoned explanation of how or why something may occur. A suggestion requires a justification/exemplification of a point.
Assess	Use evidence to determine the relative significance of something. Consider factors and identify the most important.
Evaluate	Measure the success of something and provide a substantiated judgement. Review information and then bring it together to form a conclusion, drawing on evidence.
Select…and justify	Select one option from those given and justify the choice using the resources provided and own knowledge/understanding. The justification should include consideration of alternatives in order to provide a supported argument for chosen option.