

# **Subject specific vocabulary**

The following subject specific vocabulary provides definitions of key Geography terms used in our AS-level Geography (7036) specification.

All terms stated in the specification can be used in the examinations. Students should be familiar with these terms in relation to the topics that they study. The specified terms are listed below under each of the topic headings.

Note that each list includes only the geographical terms stated in the specification. Students are encouraged to use other specialist geographical vocabulary in their answers as well as the terms listed here.

## **Terms featuring across the specification**

### **Adaptation**

Action taken by human to reduce their vulnerability or exposure to impacts.

### **Causes**

Reasons for the form/character of a phenomenon – for example why a process occurs or why a phenomenon displays its characteristic features.

### **Challenges**

Difficult, large-scale problems that require solutions.

### **Characteristics**

The key features and properties of a phenomenon.

### **Contrasting**

Where two or more phenomena differ from one another in one or more significant ways.

### **Distribution**

The geographical locations of specified phenomenon/phenomena, most often shown on a map. A distribution may or may not present as a recognisable pattern.

## Dynamic equilibrium

A state of balance in a constantly changing natural system, the operation of which attempts to balance inputs with outputs.

## Economic

Connected with the economy and therefore related to production, distribution and consumption of goods and services. Conventionally measured in money terms and connected with employment, industry, income and human welfare.

## Environmental

Concerned with the environment – water, air and land, and the organisms which occupy it (including humans) and natural resources obtainable from it.

## Factors

The underlying causes of a phenomenon and the elements which influence it.

## Impacts

The results/outcomes of events, actions or processes on people and the environment. They can be positive or negative.

## Implications

What happens or might happen as a result/consequence of specific events, actions or processes.

## Issues

Matters which cause concern to people about which there may be differing views, and which may be sources of conflict.

## Lifestyle

The way in which people normally live their lives. Lifestyles vary both within and between places.

## Management

The design and implementation of policies and strategies to run human systems and influence natural systems in order to minimise or reduce impacts or problems and enhance outcomes. Management involves deliberation, planning and action.

## Mitigation

Any actions or measures taken to reduce or offset the adverse impacts or severity of a process or event.

## Negative feedback

A cyclical sequence that decreases/diminishes an initial change in a natural system and tends to return the system to a state of equilibrium or balance.

## Opportunities

Situations where change might be achievable and a better situation reached.

## Patterns

Regularities in the occurrence or distribution of phenomena. Geographically, often shown on a map.

## Political

Concerned with the distribution and exercise of power over human affairs, the promotion of different viewpoints and policies, the resolution of any such differences and the consequent decisions and their implementation.

## Positive feedback

A cyclical sequence that increases or amplifies an initial change in a natural system.

## Problems

Difficulties, risks or issues that worry people and indicate that responses are required.

## Process

A sequence of actions, changes or functions that causes a change to take place and bring about a result.

## Resilience

The ability to withstand and recover quickly from difficulties, disruption, adversity or crisis.

## Response

The ways in which people react to events or possible events – some responses are individual, some are collective; some are planned, some are unplanned.

## Scale

The area or scope of a phenomenon or focus of study – for example: local, regional, national, international and global.

## Social

Connected with people, their quality of life, health, education, lifestyles and welfare.

## Strategies

Overarching views and approaches designed to manage a system, problem or issue.

## Sustainable

That which is capable of being maintained into the foreseeable future without prejudice to its own continuation and damage to the environment.

## System

A set of interrelated components that work together in which there are inputs and outputs of energy and materials. Natural systems tend towards dynamic equilibrium which balances inputs and outputs of energy and materials.

## 3.1 Physical geography

### 3.1.1 Section A: Water and carbon cycles

#### Atmosphere

The mixture of gases that surround the Earth whose main constituents are nitrogen and oxygen.

#### Biosphere

That portion of the Earth's outer sphere where life forms are found.

#### Carbon budget

The relative amounts of carbon that are transferred in a given time period between the various stores of carbon.

#### Carbon cycle

The combination of processes by which carbon is transferred between the main carbon stores.

#### Carbon sequestration

The long-term storage of carbon. This process occurs naturally in oceans and sediments. It can also refer to the human process of capturing carbon dioxide from the atmosphere and storing it.

#### Cryosphere

The frozen water component of the Earth's outer layers, including ice caps, glaciers and snow cover.

#### Drainage basin

The area of land from which precipitation is drained by a river and its tributaries.

#### Evapo-transpiration

The combined processes of evaporation and transpiration transferring water from the Earth's surface to the atmosphere.

#### Groundwater

The store of water beneath the Earth's surface in soil and rock in pore and fissure space.

## Hydrosphere

That portion of the Earth's surface layers contain water, including ice, groundwater, lakes and rivers, oceans and water vapour and droplets in the atmosphere.

## Lithosphere

The crust and upper mantle comprising the outermost solid layer of the Earth.

## Runoff

Water transferred from river basins to oceans, principally via river channels.

## Sere

A stage in the succession of plant and animal communities in an ecosystem. Seres are named after the character of their starting locations; lithosere (starting on bare rock), hydrosere (starting in fresh water), psammosere (starting in sand) and halosere (starting in saline conditions).

## Stemflow

Precipitation that is intercepted by vegetation and reaches the ground by flowing down stems, stalks and trunks.

## Variation

How far and how frequently a phenomenon differs from the norm or the average.

## Water abstraction

The process of taking or extracting water from natural sources for different uses by human populations.

## Water balance

The balance, in a drainage basin, between the inputs of water, mainly precipitation, and the outputs of water, mainly run-off, flows of groundwater and evapotranspiration.

## Water cycle

The continuous series of processes by which water is transferred between the main water stores.

## 3.1.2 Section A: Coastal systems and landscapes

### Barrier beach

A narrow, elongated sand ridge rising above sea level, parallel to the shore and separated from it by a lagoon.

### Cavitation

Collapse of bubbles in waves crashing into and then receding from cliffs and other solid rock features causing energetic pressure waves which break up the rock and enlarge joints and fissures in the rock.

### Coastline of emergence

A coastline that has experienced a fall in sea level or tectonic uplift of the land surface.

### Coastline of submergence

A coastline that has experienced a rise in sea level or tectonic sinking of the land surface.

### Constructive wave

Waves having a long wave length, low wave height and low frequency. The swash tends to be more powerful than the backwash and hence they are associated with the build-up of beach material.

### Dalmatian coasts

A submergent landscape of ridges and valleys that runs parallel to the coast and features islands and sea inlets – named after the landscape of Dalmatia on the eastern coastline of the Adriatic Sea.

### Destructive wave

Waves having a short wave length, high wave height and high frequency. The backwash tends to be more powerful than the swash and hence they are associated with the removal of beach material.

### Eustatic sea level change

A fall or rise in sea level, resulting from changes in the volume of water in the oceans – usually connected with global changes in the volume of ice caps and ice sheets.

### Fjord

A glacial trough flooded due to a rise on sea level.

## High energy coast

A coastline with high energy waves where erosion processes typically dominate over deposition processes.

## Isostatic sea level change

A fall or rise in sea level resulting from the land rising or falling relative to the sea.

## Littoral drift (or longshore drift)

The process whereby waves approach the shore at an angle and the difference in the direction of swash and backwash transports material along the coast.

## Low energy coast

A coastline with relatively low energy waves where deposition rates typically dominate over erosion rates.

## Mudflat

A coastal expanse of mud deposits exposed at low tide but inundated by high tides.

## Offshore bar

A ridge of sediment parallel to the coast formed of material eroded by destructive waves and transported offshore.

## Raised beach

A former beach occupying a higher level than current sea level and deposited when sea levels were higher than at present for a sustained period of time.

## Rias

A non-glaciated river valley submerged following a rise in sea level.

## Saltmarsh

An ecosystem formed on tidal mudflats largely comprising of salt-tolerant plants. It is an example of a halosere.

## Sediment budget

The balance between the input and output of sediment on a stretch of coast, commonly termed a sediment cell.



## Sediment cell

A stretch of coast in which sediments are transferred by various processes between different stores, tending to form a self-contained coastal system. The understanding of sediment cells helps in coastal management.

## Tectonic sea level change

A fall or rise in sea level, resulting from changes in land surface levels and configuration associated with tectonic processes.

## Tides

The cyclical rise and fall of the level of the sea in response to the gravitational attractions of the moon and sun.

## Tombolo

A ridge of beach sediment that has extended to join a former island to the mainland.

## Wave quarrying

This involves high energy waves hitting rock faces with sufficient force to enlarge joints and remove particles of rock through vibration.

## Weathering

Sub-aerial processes occurring above the waterline leading to the disintegration and decomposition of rock and thus influencing the nature of landforms and the character of the landscape.

### 3.1.3 Section A: Glacial systems and landscapes

#### Active layer

The surface layer above permafrost that thaws seasonally in periglacial environments.

#### Basal sliding

The movement of ice at the base of a warm-based glacier, lubricated by subglacial meltwater.

#### Blockfield

A surface covered in shattered, frost weathered angular rock debris.

#### Cold based glacier

A glacier whose base temperature is such that glacial ice is frozen to the bedrock all year round.

#### Compressional flow

Glacier flow associated with decreasing valley gradient - deceleration of flow leading to thickening of the ice mass and closing of crevasses.

#### Esker

A ridge of material generally running in the direction of ice and formed by fluvioglacial deposition.

#### Extensional flow

Glacier flow associated with increasing valley gradient, acceleration leading to thinning of the ice mass and opening of crevasses.

#### Frost action

The weathering and disintegration of rock caused by repeated fluctuation of temperature around freezing point.

#### Glacial budget

The balance between the material inputs and outputs of a glacier.

#### Ice wedge

A narrow, vertical mass of ice that penetrates cracks in the ground from the surface downwards and progressively enlarges them.

## Internal deformation

Small scale deformation of ice crystals caused by gravity and the pressure of surrounding ice causing them to slide over each other in a series of parallel planes with an overall downslope component.

## Kame

A steep-sided mound on the floor of glaciated landscapes formed by fluviglacial deposition.

## Lobe

A semi-circular build-up of soil present on hillslopes in periglacial environments.

## Nivation

Erosion of snow-covered surfaces by freeze-thaw action forming hollows in the landscape.

## Outwash plain

An extensive, gently sloping area of deposited materials formed in front of a glacier.

## Patterned ground

Distinctive patterns of surface material found in periglacial areas and mainly formed by frost action.

## Permafrost

Frozen soil and rock that has remained frozen for at least two consecutive years.

## Periglacial

Concerning areas processes and landforms adjacent to an icesheet or glacier.

## Pingo

A dome-shaped mound formed by the freezing of subsurface water covered by a layer of soil.

## Roches moutonnée

An outcrop of rock shaped by glacial erosion, with the upslope side being steep and irregular in form contrasting with the downslope side being relatively smooth and gently sloping.

## Solifluction

Movement in summer months of thawed wet soil down gentle slopes under which frozen subsoil acts as a barrier preventing percolation and thus lubricating the overlying soil.

## Terracette

Small ridges on a slope formed by soil creep.

## Thermokarst

A periglacial landscape consisting of hollows, ponds and hummocks caused by local melting of the permafrost.

## Warm based glacier

A glacier where the base temperature fluctuates above melting point during summer months, allowing liquid water to lubricate glacial movement.

## Weathering

Sub-aerial processes leading to the disintegration and decomposition of rock and thus influencing the nature of landforms and the character of the landscape.

## 3.2 Human geography

### 3.2.1 Section A: Changing places

#### Community group

An organised collection of people with shared interests and aims often concerning aspects of public life.

#### Endogenous factor

These constitute the characteristics of the place itself, including aspects such as climate, topography, land use, the built environment and social and economic characteristics, all of which contribute to peoples' experience of the place and their sense of place.

#### Exogenous factor

These constitute external agents and processes that affect the character of a place and the experiences of those who live there. They include the activities of central governments, decision taking by business and public agencies, and the operation and effect of the national and international economy.

#### Experienced place

A place in which a person has actually spent time and directly experienced its characteristics.

#### Far place

A place that a person perceives as being physically distant. The place may be viewed as being different to that of their own experienced place.

#### Identities

A combination of physical, psychological and behavioural traits that contribute to a person's self-awareness and how others perceive them. This is in part shaped by where they live and/or their place of birth.

#### Insider perspective

A viewpoint from an individual who typically lives in a place and therefore has frequent, direct experience of that place, and understands the social and cultural norms.

#### Media place

A place that has a meaning for a person as a result of exposure to images and information about that place via TV, radio, print, film or online.

## Near place

A location that a person perceives as being physically close, whether spatially or through easy access. Often this place is inextricably linked to the place the individual is located.

## Outsider perspective

A viewpoint from an individual who is not from a place or who doesn't live there and has little experience of the place. Such individuals may not understand the social norms of the society.

## Perspective

A particular attitude or view towards a place. This can be influenced by media representation and/or personal experience.

## Place

An area on the Earth's surface which is identified as distinct by the people who live in it or visit it, and which has meaning for them. Such meaning can and may well be shared by different groups of people.

## Representation

How a place is portrayed by the views, statements and communications of others. This may be through formal sources such as census data or through informal sources such as media reportage and imagery or verbalisation by others.

## 3.3 People and the environment

### 3.3.1 Section B: Hazards

#### Acid rain

Acidic precipitation that has negative impacts on natural ecosystems and is associated with air pollution.

#### Coastal flooding

Dry and low-lying land is submerged by seawater.

#### Convection currents

The circular motions of upper mantle layers responsible for sea floor spreading and driven by upwelling mantle material.

#### Gravitational sliding

The movement of tectonic plates as a result of gravity.

#### Island arc

A linear chain of volcanic island associated with an ocean trench where subduction is taking place.

#### Lava flow

Molten rock flowing on the surface. Acidic lava tends to be more viscous and solidifies nearer to source than basaltic lava which generally flows over greater distance before solidifying.

#### Liquefaction

Loosely packed, water-logged sediments at or near the ground surface lose cohesion and behave as a liquid rather than a solid because of shaking during an earthquake.

#### Lithosphere

The crust and upper mantle that form the outermost solid layers of the Earth.

#### Magma plume

A rising column of hot rock in the mantle.

#### Magnitude

The overall strength or 'size' of a hazard.

## Mudflow (lahar)

A mix of volcanic ash and rainwater or meltwater that travels downslope.

## Multi-hazardous environment

An environment prone to experiencing combinations of seismic, volcanic, atmospheric or wildfire hazard.

## Nuées ardentes (Pyroclastic flows)

Dense, fast-moving flows of hot gas (over 800 °C) and rocks that move rapidly downslope at speeds over 700 km/hr. These terms are often used interchangeably but some volcanologists confine the term *nuées ardentes* to flows comprising only of hot gases.

## Pyroclastic and ash fallout

Airborne particles of varying sizes that have been ejected from volcanic vents into the atmosphere before falling to the surface.

## Ridge push

A driving force for the movement of tectonic plates that occurs at mid-ocean ridges as a result of gravitational forces causing downward movement away from the ridge.

## Rift valley

A steep sided valley formed by the downward displacement of crust due to separation of tectonic plates.

## Sea-floor spreading

The formation of a new oceanic crust which occurs through the upwelling of magma at mid-ocean ridges and its outward movement from such ridges.

## Seismicity

The processes associated with earthquakes in a given area. The frequency and intensity of such processes.

## Shockwave

A wave of energy spreading outward from the focus of an earthquake.

## Slab pull

A driving force for the movement of tectonic plates occurring at subduction zones as a result of sinking of the crust there.



## Storm surge

A temporary, localised rise in sea level as a result of atmospheric pressure changes and storm wind direction.

## Tephra

Rock fragments and particles, eg pyroclastic material, ejected during a volcanic eruption and subsequently deposited on the earth's surface.

## Tsunami

One or more high magnitude sea wave caused by an earthquake or other offshore underwater disturbance such as slippage of submarine slopes.

## Vulcanicity

The processes associated with active volcanoes in a given area. The frequency and intensity of such processes.

## Wild fire

An uncontrolled fire occurring in open country or wilderness regions.

## 3.3.2 Section B: Contemporary urban environments

### Counter-urbanisation

The movement of population and economic activity away from large urban centres into smaller urban settlements or rural areas.

### Cultural diversity

This existence of a variety of different groups of people with contrasting beliefs, values, norms and behaviour within a society and the area it occupies.

### Decentralisation

The movement of population and industry away from the urban centre to outlying areas. This generic process contributes to both suburbanisation and counter-urbanisation.

### Deindustrialisation

Long term decline of manufacturing industry leading to significant social and economic change – as seen in the UK in the second half of the 20<sup>th</sup> century.

### Demographic

Relating to the structures and characteristics of populations and the processes they experience eg migration.

### Dereliction

The state of buildings, infrastructure and land having been abandoned and become dilapidated through lack of care and maintenance.

### Edge city

A modern urban form with a concentration of shops, offices and entertainment, which has emerged as an identifiable urban centre beyond the original city boundary. Edge cities are characteristic of societies and regions with high levels of personal mobility and available space such as in the south-western United States.

### Fortress development

An urban area, designed around surveillance, protection and exclusion measures, all designed to increase security. Gated communities are an example of a fortress development.

### Gentrified area

An area of a city that has been transformed from a run-down state and low property values to the opposite – improved housing occupied by higher income groups leading to changing and increased commercial activity in the area and higher property values.

## Liveability

Aspects of urban living which make life more comfortable. It is affected by personal safety, political stability, natural amenities such as green space, cultural life, employment opportunities, political stability or basic safety.

## Megacity

A city or urban agglomeration with a population of more than 10 million people.

## Particulates

Tiny particles, such as dust or soot, largely given off when fossil fuels such as coal or oil are burned.

## Regeneration

The process of urban or rural improvement, which may be economic, social or environmental or any combination thereof.

## Social cohesion

The extent to which groups of people are connected, integrated and share common values.

## Social segregation

The extent to which groups of people are separated from the larger population and from each other due to factors such as income, wealth, ethnicity, religion, class or age.

## Suburbanisation

The outward expansion of existing urban area by the movement of people, services and employment towards the edges of an urban area, facilitated by the development of public transport networks and increased personal mobility.

## Sustainable cities

Cities that are able to adapt to, mitigate and promote economic, social and environmental change, meeting the needs of their populations and improving their lives without leaving a burden on future generations.

## Sustainable urban drainage systems (SUDS)

An approach to managing rainfall by using natural process in the landscape to reduce flooding, control flooding and provide amenities for the community.

## Urban heat island effect

The area around and above an urban area that experiences significantly warmer average temperatures than the surrounding rural areas.

## Urban policy

Strategies by local or central government to manage the development of urban areas and reduce problems they experience.

## Urban resurgence

The movement of population and economic activity back into an area that was previously in decline, reviving the area.

## Waste stream

The complete flow of waste from its source through to recovery, recycling or disposal.

## World city (global city)

Cities that have influence on a global scale by virtue of their history, size, connectivity and role in the global economic system. The most prominent criterion is the financial status and global commercial power.