

Edexcel Geography GCSE

The UK's Evolving Physical Landscapes

Glossary of Definitions

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Glossary of Definitions - Physical Landscapes

Abrasion - A form of erosion where loose material and sediment 'sandpapers' the walls and floors of the river, cliff or glacier.

Attrition - Rocks bang against each other chipping away to make smaller, smoother rocks.

Backshore - The upper beach closest to the land, including any cliffs or sand dunes.

Beach Nourishment - The addition of sand and sediment to an eroding beach by humans. The new material will be eroded by the sea which saves the cliffs or sand dunes from erosion and recession.

Biological Weathering - Rocks are broken apart by vegetation and roots, or chemical reactions from animal faeces erodes the rock face.

Concordant Coast - A coastline where bands of alternate geology run parallel to the coast.

Corrasion - A form of mechanical erosion where material and sediment in the sea is flung at the cliff-face as waves break against it, this breaks up the rocks making up the cliff.

Chemical Weathering - The weak acid in rainwater will dissolve chemical compounds in the rock.

Discordant Coast - A coastline where bands of alternate geology run perpendicular to the shore.

Drainage Basin - The area of land drained by a river and its tributaries.

Dredging - Rubbish and sediment are dug up from the bottom of the river.

Embankments - The banks of the river are built up in brick and concrete, to increase the channel capacity.

Estuary - The point at where the river meets an ocean, often muddy or silty. Sometimes estuaries become exposed at low tide or hazardous to traverse in a boat due to sandbanks.

Fetch - The length of water over which the wind has travelled.

Floodplain - The low lying and wide floor of a river valley. Floodplains are found in the lower course and tend to act as overspill for the river when its channel is full.

Floodplain Zoning - Controlling where houses and buildings are built relative to the river to reduce their risk of flooding.

Freeze Thaw - A form of physical sub-aerial weathering where water freezes in the cracks of a rock, expands and enlarges the crack. This weakens the rock overtime leaving it more open to erosion.

Geology - The physical structure and arrangement of a rock.



Groyne - A form of hard-engineering. Low-lying concrete or wooden walls, constructed perpendicular to the seafront and run out to sea. They encourage the trapping of sediment to reduce erosion caused by longshore drift or by winds.

Hard Management - The use of concrete structures to reduce or halt the recession of a coastline. Includes: Groynes, Sea Walls, Rock Armour.

Highlands - An area of land that is at a high elevation and tends to have a larger relief.

Hydraulic Action - The pressure of compressed air forced into cracks in a rock face will cause the rock to weaken and break apart.

Igneous Rock - Rock that has formed from volcanic activity, often cooled magma on the Earth's surface.

Impermeable - A rock that does not allow water to pass through it.

Levee - The banks of the river.

Longshore Drift - The transportation of sediment along a beach. Longshore Drift is determined by the direction of the prevailing wind.

Lowlands - An area of land that has a small relief, so tends to be flat and at a low elevation.

Mass Movement - Where there is a large downhill movement of material usually from a cliff-face. Here, the rock is often weak due to erosion and the movement is caused by gravity.

Mechanical Weathering - Sometimes called physical weathering, this is the breakdown of rocks due to forces, not chemical reactions.

Metamorphic Rock - Rock formed under intense pressure and heat, often close to tectonic plate boundaries.

Permeable - A rock that allows water to pass through it.

Relief - The difference in the height of land for a particular region. A large relief means a region has a large difference between the lowest and highest points.

Rock Armour - Large rocks or concrete blocks, used as barricades to reduce marine erosion at the base of cliffs.

Saltation - A form of transportation where smaller sediment bounces along the sea bed pushed by currents. This sediment is too heavy to be picked up by the flow of the water.

Salt Marsh - In sheltered bays or behind spits, salt and minerals will build up. Vegetation may establish, further stabilising the marsh.

Sand Dune - A depositional landform, where sand and sediment build up around driftwood and accumulate over time.



Sea Wall - A hard-management coastal defense, where a concrete wall is built parallel to the seafront, to redirect the energy of waves away from sensitive cliffs or the edge of a coastal town.

Sedimentary Rock - Rock that has formed as sediment and rocks become compressed and cemented together over thousands of years.

Soft Management - The use of natural materials and environmentally sustainable approaches to reduce coastal recession. Includes: Beach Nourishment, Managed Retreat, Sand Dune Encouragement.

Solution - Acidic water dissolves chemicals from a rock face into the water. These chemicals can then be transported as chemical compounds in the water.

Storm Hydrograph - A graph to show the variation of river discharge over a short period of time (days).

Suspension - Small rocks that are light enough to float are carried in the water, rather than along the bed.

Spit - A long depositional landform, formed from sand and shingle.

Thalweg - The path of fastest water flow in a river.

Traction - Large rocks and boulders are rolled along the bed of the river or sea.

