

# Edexcel A Geography GCSE

## Topic 1B: River Landscapes & Processes

### Glossary of Definitions

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

**Attrition** - Rocks and pebbles continuously hit against each other, causing them to break into smaller rocks until they become sediment.

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

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

**Drainage Basin** - Often called a catchment area, it is an area of land where all water, precipitation and streams flow and drain off into a single river, a bay or out to sea.

**Dredging** - Sediment (silt) and other materials are dug up and removed from the bottom of rivers and lakes.

**Embankments** - The banks of a river are raised up by brick and concrete, to increase the channel capacity and prevent flooding.

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

**Floodplain** - The wide, low-lying floor of a river valley. Floodplains are found in the lower course of a river and tend to act as overspill when the river 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.

**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 the cracks of a rock face causes 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** - A natural or artificial build up of earth on the banks of a river to prevent water from overspilling and controlling the river flow.



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

**Mass Movement** - 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 (such as freeze-thaw), 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.

**Saltation** - A form of sediment transportation where smaller rocks/pebbles are pushed along the seabed by currents, because they are too heavy to be carried in the flow of the water.

**Sedimentary Rock** - Formed from the broken remains of sediment and other rocks that have compressed and cemented together over thousands of years.

**Solution** - Slightly acidic water dissolves chemicals from a rock face (usually limestone) and transports these dissolved materials and chemical compounds.

**Storm Hydrograph** - A graph that shows 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.

**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.

