

| Landscapes of the UK GCSE topic 1 |

River landforms		Processes of erosion and transportation	Key terms	
Waterfalls	Created when the river flows over an area of hard rock followed by soft rock.	Attrition: Where pebbles hit each other or landforms, making rocks break and get smaller and rounder.	weathering	The breakdown of material in situ by physical, chemical and biological processes; if movement is involved this becomes erosion.
Gorges	Over time waterfalls top lip collapses occur and the waterfall retreats creating a gorge.	Abrasion: When sediment is thrown against a surface by water and rubs the material to smooth the land.	igneous	Rocks formed within the interior of the Earth from molten rock
V-shaped valley	The river erodes vertically downwards near its source creating V-shaped valleys	solution: Where rocks are dissolved in water.	sedimentary	Rocks formed by layers of sediment, usually at the bottom of the sea.
floodplains	When a river floods onto the flood plain the water slows and deposits the eroded material. This builds it up	Hydraulic action: Where water forces its way into cracks, which creates weaknesses in rocks, splitting them apart.	metamorphic	Rocks that have been changed as a result of heat and pressure being applied to them for long periods of time.
Meander	The current is faster on the outside of the bend. Therefore more erosion takes place on the river bend forming a river cliff. The current is slower on the inside of the bend. So eroded material is deposited on the inside forming a slip-off slope	Traction – the movement of larger sediment rolling along the bottom of the sea or a river.	geomorphic processes	Processes that result in a change in the shape of the Earth; from ‘geo’ meaning the earth and ‘morph’ meaning to change shape.
		Saltation – small pieces of sediment picked up temporarily in the water	lateral erosion	Erosion sideways; this widens the river valley and channel as the river meanders (bends). If is dominant in the middle and lower course of a river.
		Suspension – smaller particles can be suspended in water.	cross profile	Shows you what the cross-section of the river channel looks like; it should be narrow and shallow at the source and very wide and deep at the mouth
Oxbow lake	erosion causes the outside of bends to become closer and the river breaks through. Deposition cuts off the meander forming an ox-bow lake	Solution – when minerals dissolve in water	longshore drift	The movement of sediments along a stretch of coastline as a result of wave action
		Deposition: the laying down of materials that have been transported (due to loss of energy).	sea walls	Walls made on concrete to reflect and absorb wave energy to prevent erosion.
Levees	Raised banks formed by repeated flooding and deposition of river sediment (alluvium) on the river banks	Coastal Landforms	rip-rap barriers	Large rocks placed in front of cliffs to dissipate wave energy to protect the cliffs behind from erosion.
		Beaches - Beaches are areas of land that lie between the storm-tide level and the low-tide level. They can be made up of sand, pebbles or a mixture of both.	gabions	Wire cages filled with stone used to absorb wave energy to prevent erosion
		Spits - Spits are created when the coastline ends but the process of longshore drift continues. If the conditions are right the sediment is deposited and is built up to create new land.		
		Caves, arches, stacks and stumps		
		Erosion by waves widens the weakness in the cliff to form a cave. Waves cut through the headland to form an arch. Collapse of arch due to gravity to form a stack. e) The stack is undercut all the way round as wave cut notches form. It eventually collapses to leave a stump which is covered at high tide		

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