

Year 9 : Cycle 1: Geography 100% sheet

Section 1: UK Physical Landscapes		Section 2: Types of erosion	
fluvial landscape	extensive area of land → has been shaped by a flowing river	1. hydraulic action	moving water forces air into cracks in rocks → pressure weakens rocks
fluvial landform	a specific feature found in river landscapes e.g. a waterfall landform	2. abrasion	rocks carried by river wear down the riverbed and banks
UK upland areas	more than 200m above sea level → mostly north/west UK e.g. Pennines	3. attrition	rocks carried by river smash together → get smaller smoother rounder
UK lowland areas	less than 200m above sea level → mostly south/east UK e.g. The Fens	4. solution	soluble particles of sediment are dissolved into the river
UK river systems	many river systems in the UK e.g. the River Severn → longest river in UK	5. vertical erosion	downward erosion of bed (bottom of river)
Section 3: Types of transportation		Section 4: Rivers keywords	
1. traction	the rolling of boulders and large pebbles along the river bed	source	where a river begins/starts → upland areas (upper course)
2. saltation	particles of sediment bouncing along the river bed	mouth	where a river ends/flows into sea → lowland areas (lower course)
3. suspension	small pieces of sediment floating in the moving river water	channel	the area in the river where the water flows e.g. the riverbed and banks
4. solution	soluble particles of sediment are moved whilst dissolved in flowing river	valley	the V shaped area of land around a river
Section 5: River profile		Section 6: River landforms - Erosion	
	cross profile	1. interlocking spurs	river erodes softer rock → leaves ' zip ' shaped pattern of harder rocks
upper course/source	channel narrow/shallow → valley steep V shaped	2. waterfalls	hard rock on top of soft rock → soft rock erodes → hard rock overhangs
middle course	channel wider/deeper → valley flatter shape	3. gorges	overhanging rock at waterfall collapses → waterfall retreats → gorge

Section 7: Fluvial landforms – Erosion/transportation		Section 8: Fluvial landforms – Deposition.	
1. meanders	faster flow on outside bank = lateral erosion → slower flow on inside bank = deposition → creates bend shape in river called a meander	1. levées	flood → heaviest sediment deposited river edge → creates higher banks
2. oxbow lakes	flood breaks through meander neck → creates new channel and lake	2. flood plains	lateral erosion of meanders makes lower course of valley wider/flatter
Section 9: Factors affecting flood risk.		Section 10: Hydrographs	
flood risk	predicted frequency of floods in an area → how likely an area is to flood	hydrograph	shows link between discharge and precipitation over period
1. precipitation	prolonged, intense rainfall can saturate soil → increases surface run-off	discharge	volume of water flowing past a point on a river (e.g. per second)
2. geology - rock type	water cannot infiltrate impermeable rock → increases surface run-off	lag time	length of time between peak (highest) precipitation and peak discharge
3. relief	water cannot infiltrate into steep slopes → increases surface run-off		

Section 11: Hard engineering		Section 12: Soft engineering	
dams and reservoirs	used to store water	flood warnings	warning people → can evacuate
river straightening	water flows away more quickly	flood plain zoning	important buildings not near river
embankments	higher banks hold more water	planting trees	trees infiltrate and absorb water
flood relief channels	river has extra capacity for water	river restoration	reduces flooding downstream
Section 13: River erosion - Directions			
vertical erosion	downward erosion of bed (bottom of river)		
lateral erosion	sideways erosion of banks (sides of river)		