

AS: Checklist for Hydrology Topic

Checklist for revision	Understand and know it	Need more revision	Do not understand- Must revise
I can describe the hydrological cycle and the drainage basin cycle including naming all the processes that occur e.g. percolation			
I can explain how the drainage basin acts as an open system with inputs, outputs, stores and flows			
I can explain the relationships between different components of the drainage basin cycle e.g. between infiltration and interception			
I know what ground water , aquifers, springs and the water table are			
I understand how ground water is depleted and recharged			
I know the difference between saturated overland flow and infiltration excess overland flow			
I know the difference between porosity and permeability			
SKILL: I know what a hydrograph is and how to read and interpret one			
I know and can explain that many factors which influence the shape of a hydrograph			
I know what a river regime is, and understand how climate can impact a river regime			
I can define velocity, discharge, wetted perimeter, channel depth, channel width, cross sectional area and gradient			
I understand what channel efficiency is and how to calculate it			
I know what Manning's Equation is and how it is linked to velocity and discharge			
I understand how a river changes from source to mouth (long profile)			
I know the four main types of erosion in a river			
I know the four main types of transportation in a river			
I know how a waterfall and rapids were formed			
I understand how a meander was formed and the terms pool, riffle, helicoidal flow, thalweg and turbulent flow			
I can explain how a meander changes from the inside to the outside bend			
I know what deposition is and where it occurs in a river			
I can explain the formation of several depositional features (levees, floodplains, alluvial fans and deltas			
I know how urbanisation can impact on a drainage basin			
I know the causes of flooding			
CASE STUDY: I can describe the effects of flooding in named locations with specific dates and statistics			
I can explain how floods can be ameliorated or prevented			
I know what causes droughts and the impacts they can have			
CASE STUDY: I can describe the causes and effects of drought in named locations with specific dates and statistics			