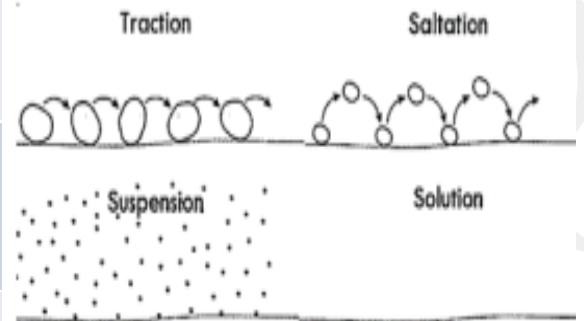


SUBJECT: Geography

UNIT: KS4 Physical Landscapes - Rivers



Types of Erosion		Transportation
The breaking down of rocks.		Traction – large material being rolled or pushed
Attrition	Rocks that bash together to become smooth/smaller.	Saltation – smaller material bouncing along
Solution	A chemical reaction that dissolves rocks.	Suspension – tiny material floating
Abrasion	Rocks hurled at the base of a cliff to break pieces apart.	Solution – dissolved material moving
Hydraulic Action	Water enters cracks in the cliff, air compresses, causing the crack to expand.	



What is Deposition?

When a river loses energy, it drops the sand, rock particles and pebbles it has been carrying. This is called deposition.

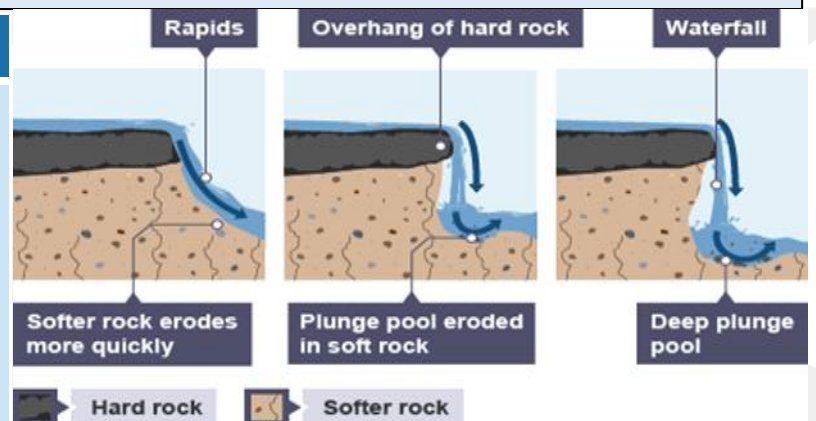
Erosional landforms – v-shaped valleys, interlocking spurs, waterfalls and gorges.

Erosional and depositional landforms – meanders and oxbow lakes.

Depositional landforms – levees and floodplains.

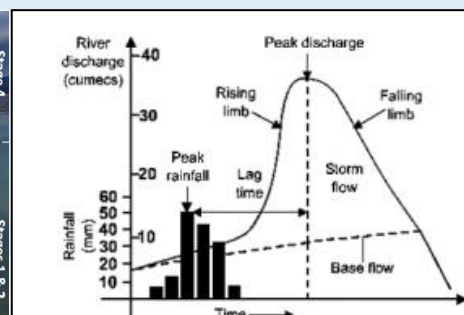
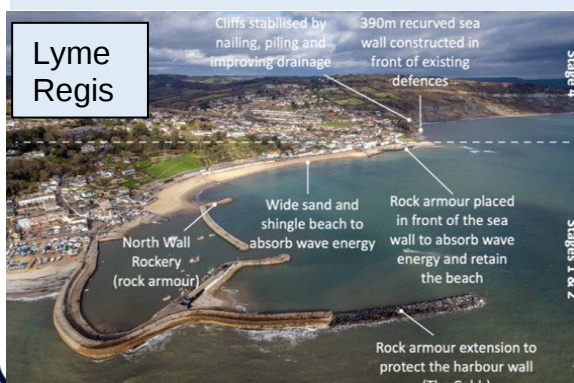
Formation of a waterfall

Hard rock overlies softer rock, which is eroded quicker and a plunge pool is created. The softer rock is undercut by hydraulic action and abrasion leaving an overhang of hard rock. Due to a lack of support, the overhang collapses and the waterfall retreats. The process starts again. Eventually a steep sided valley called a Gorge is formed.



Hard engineering – man-made defences build to control river flooding e.g. dams, straightening meanders, embankments and flood relief channels.

Soft engineering – sustainable approach to reduce the impacts of erosion e.g. flood plain zoning, flood warnings and preparation.



Hydrograph – shows how a river discharge changes in response to a precipitation.

Flood factors – things that can increase the risk of flooding. Split into human and physical factors.