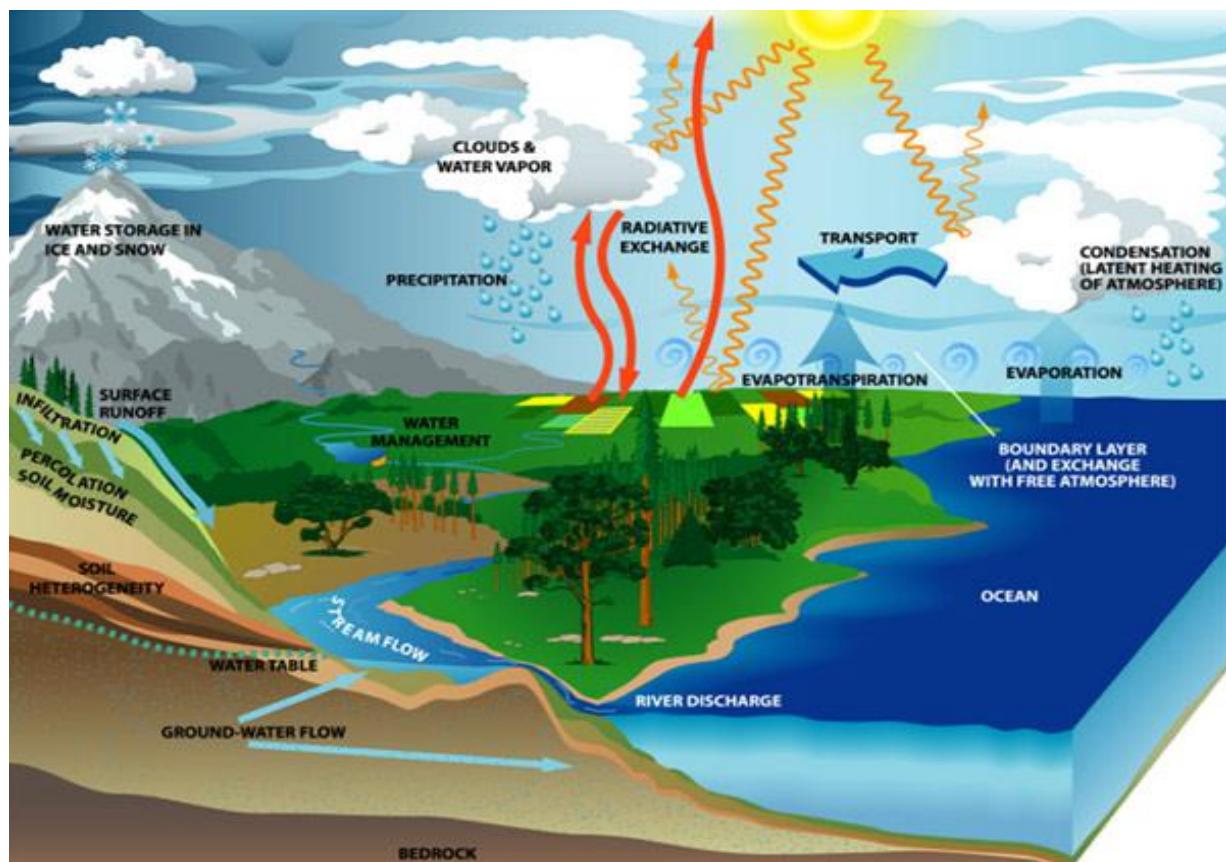
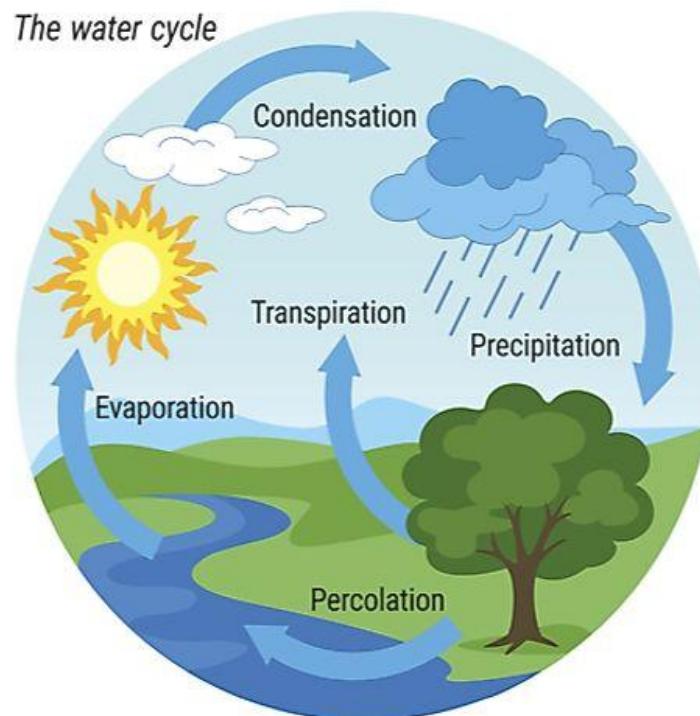
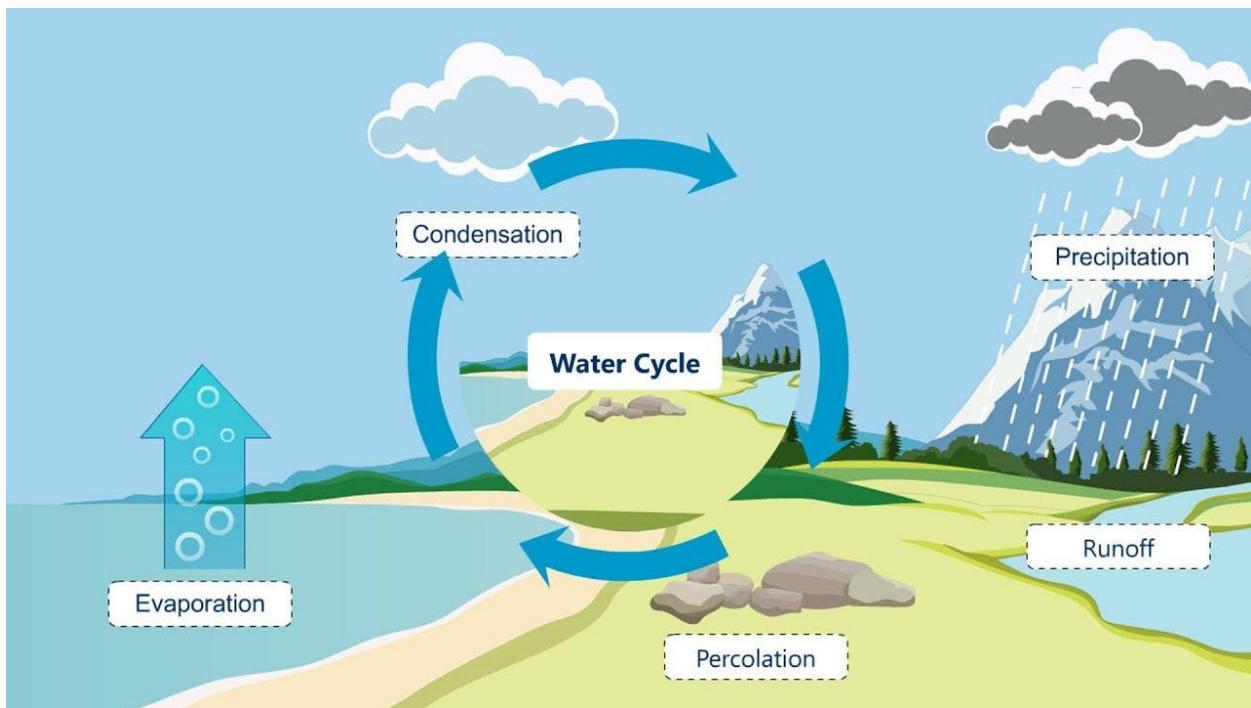
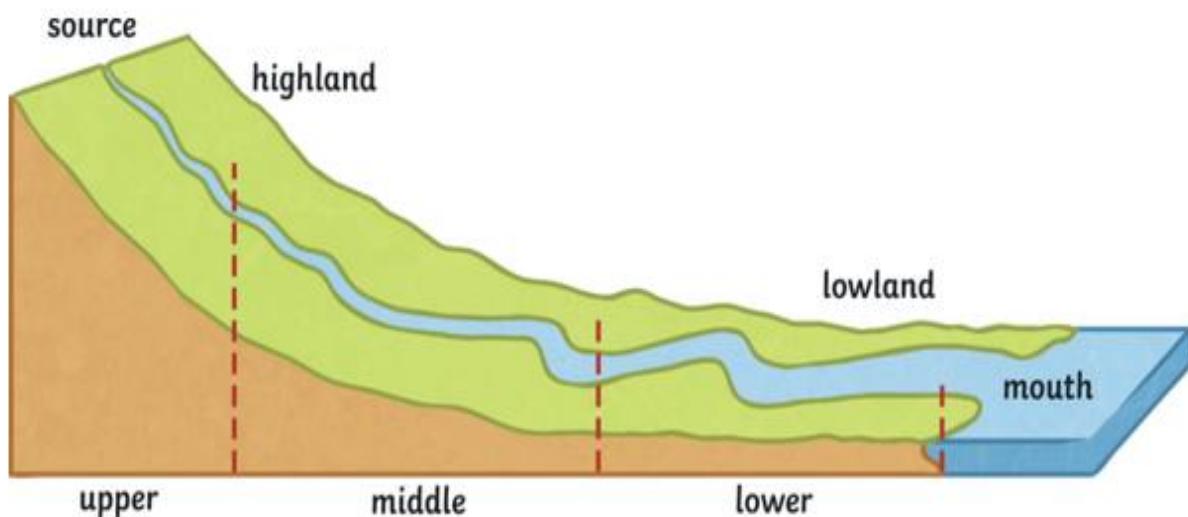


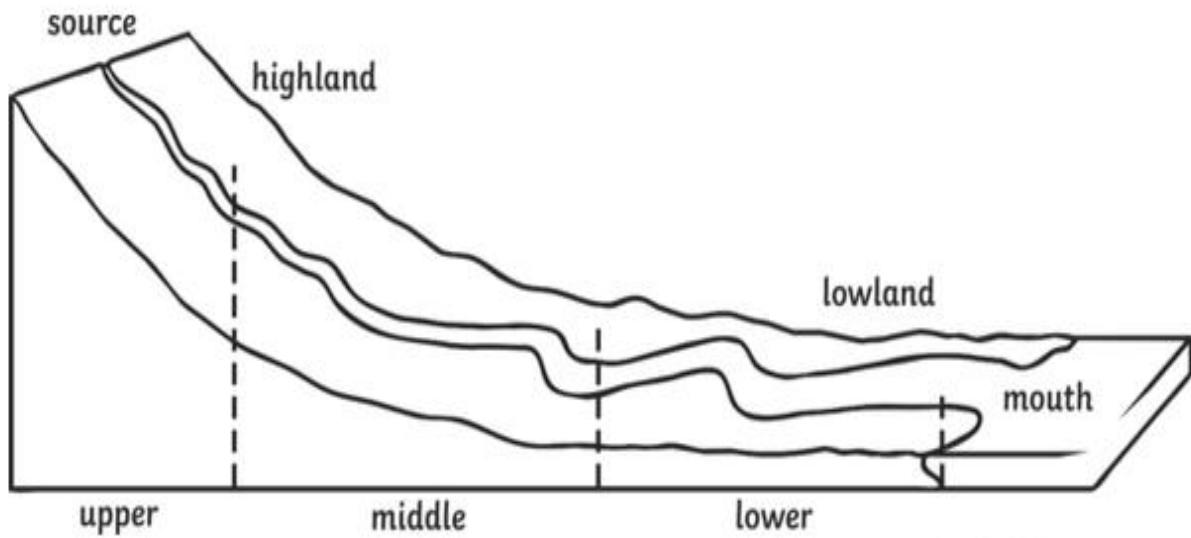
## THE HYDROLOGICAL CYCLE (THE WATER CYCLE)



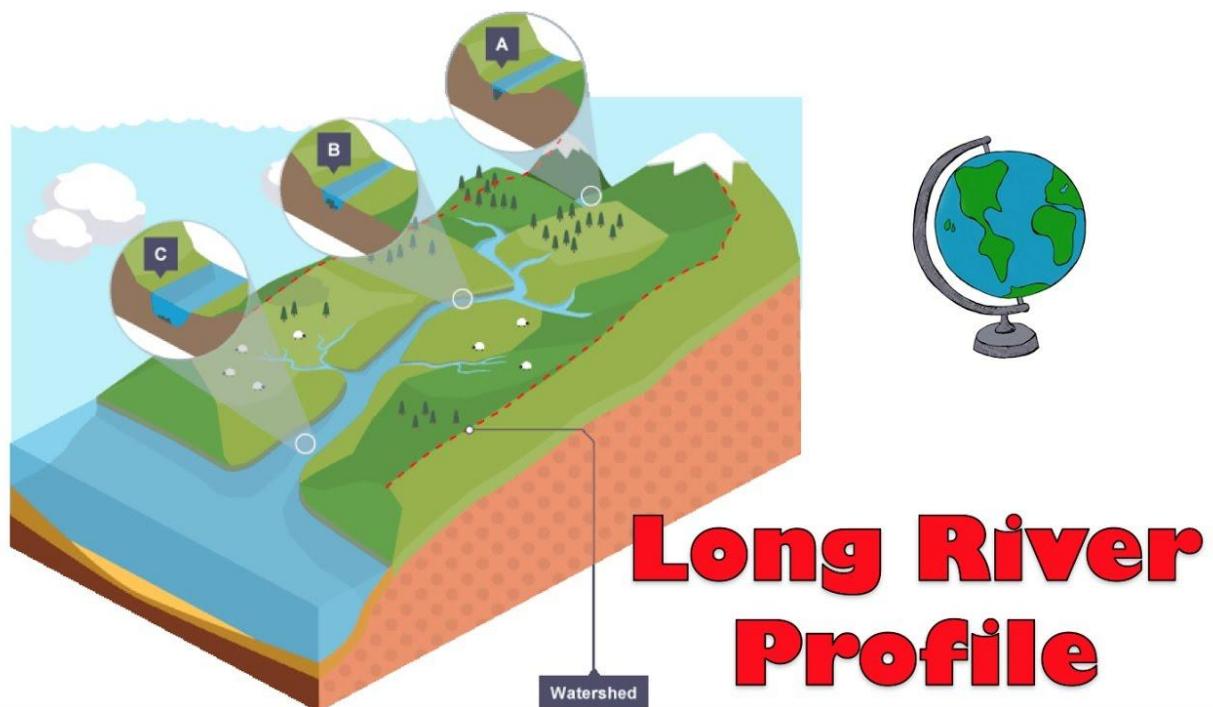


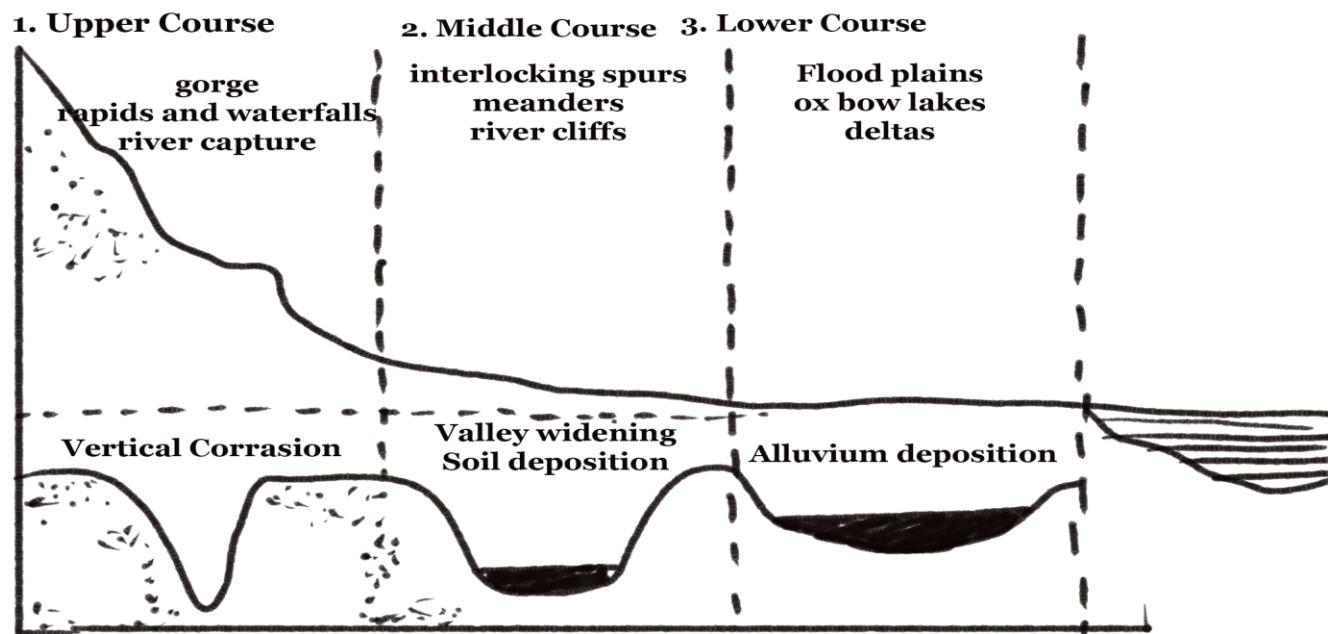
## A LONG PROFILE OF A RIVER



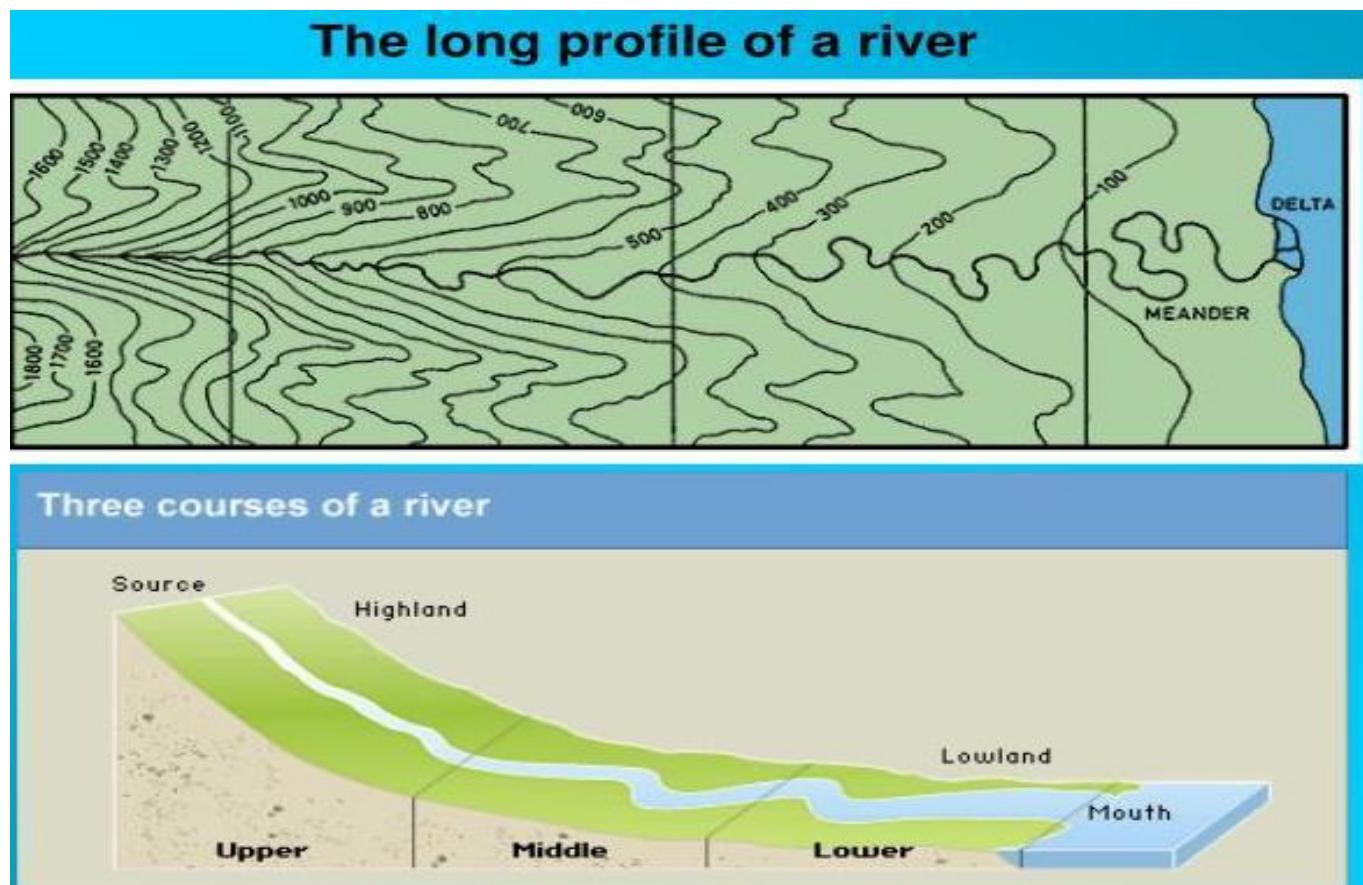


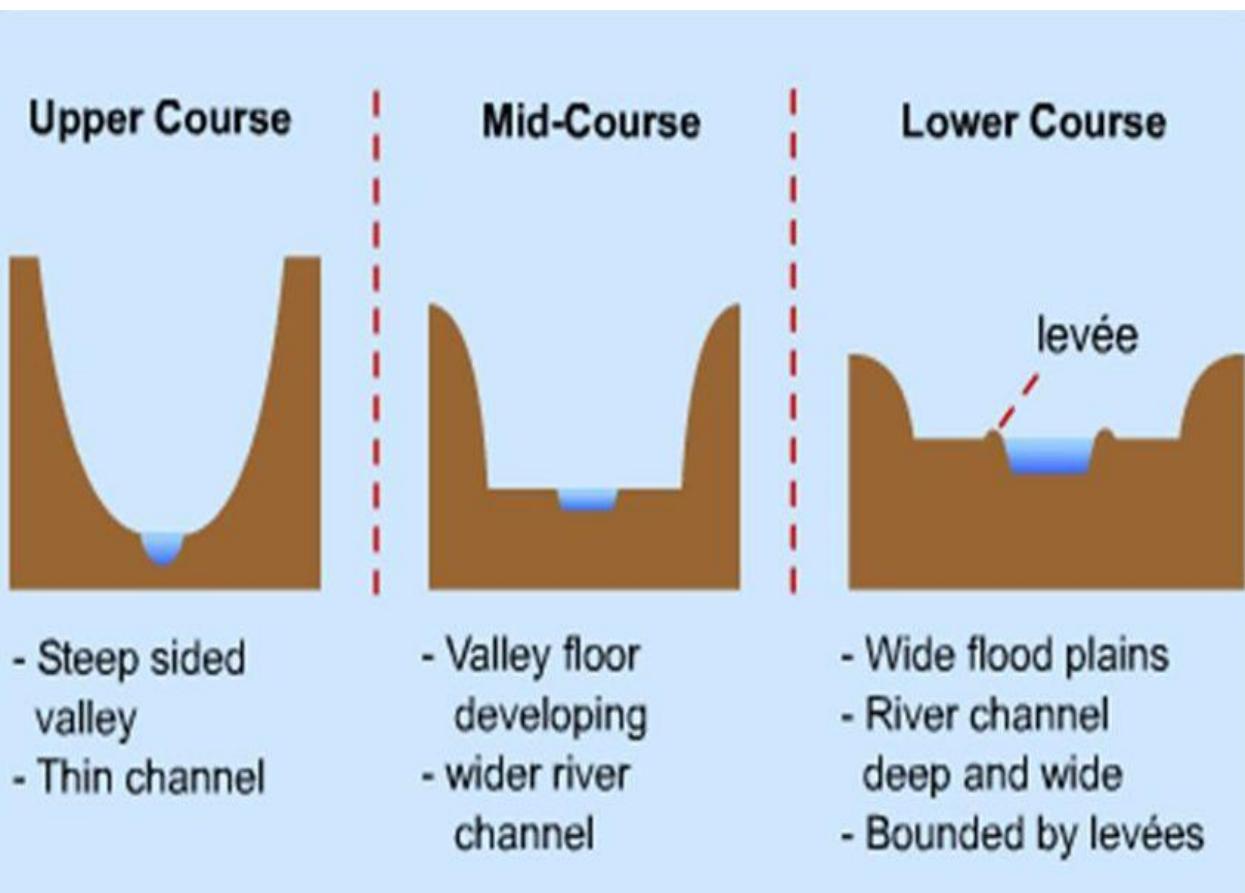
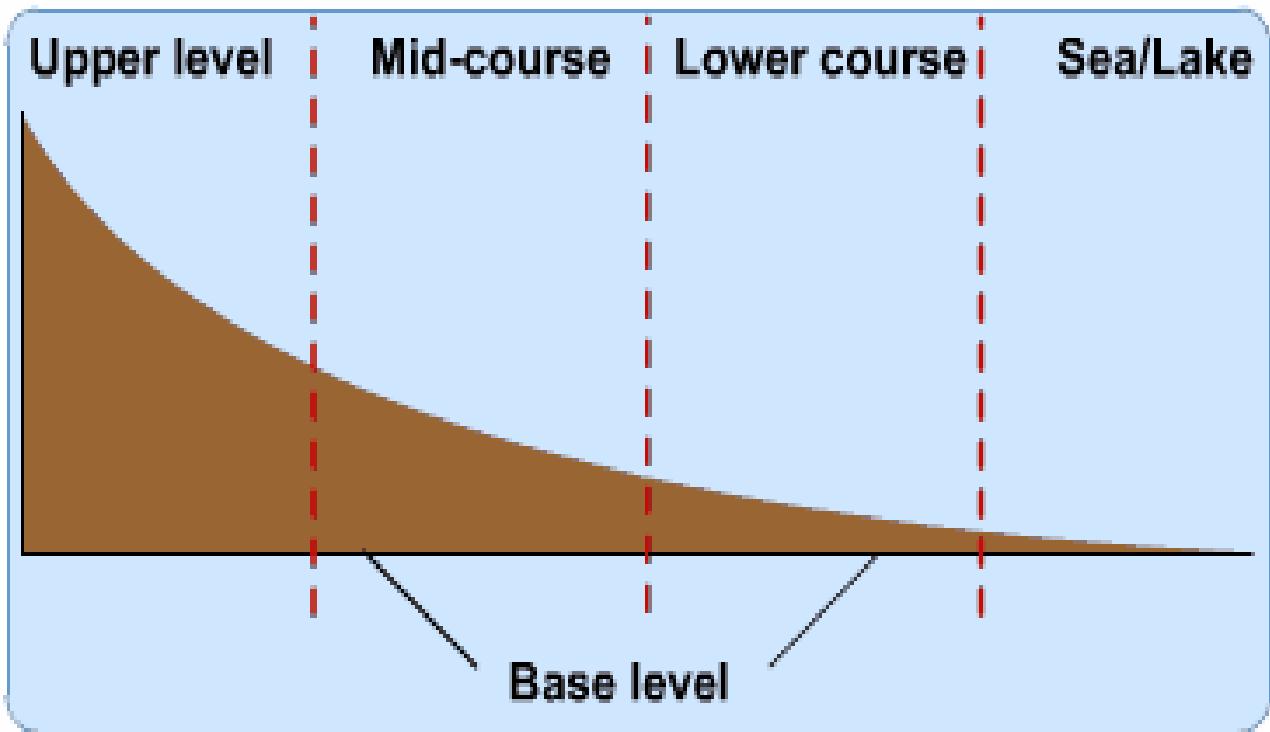
twinkl.com



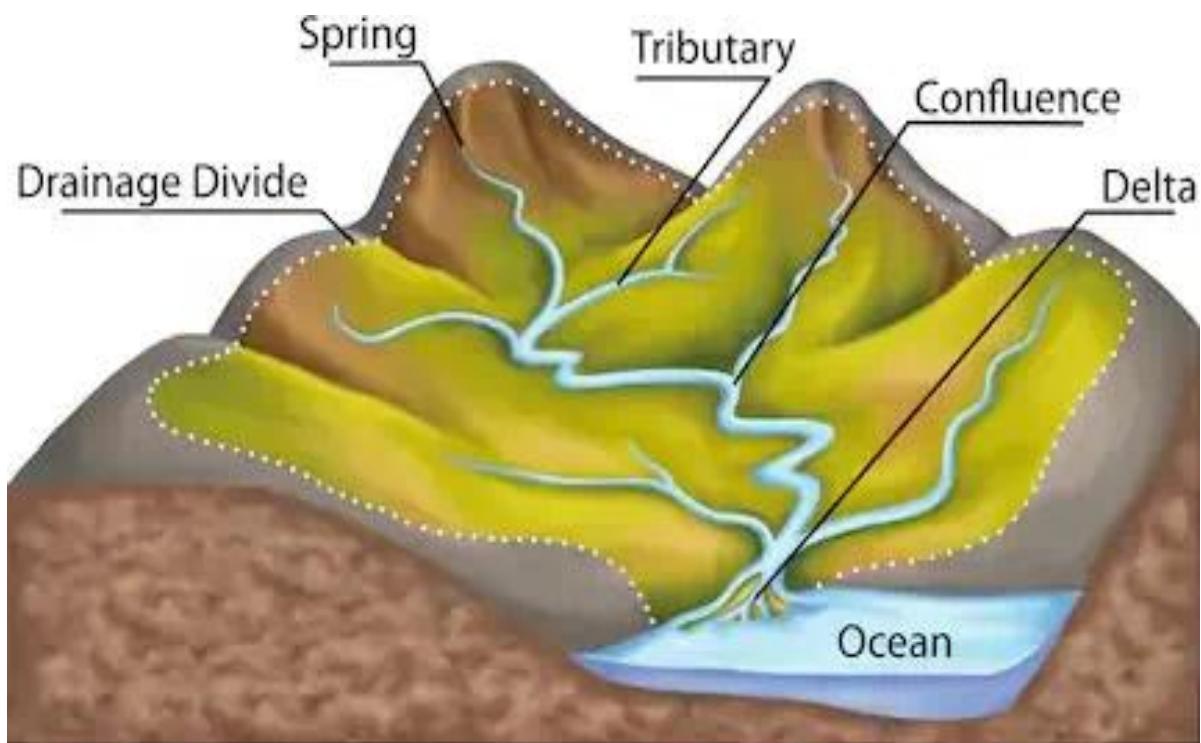
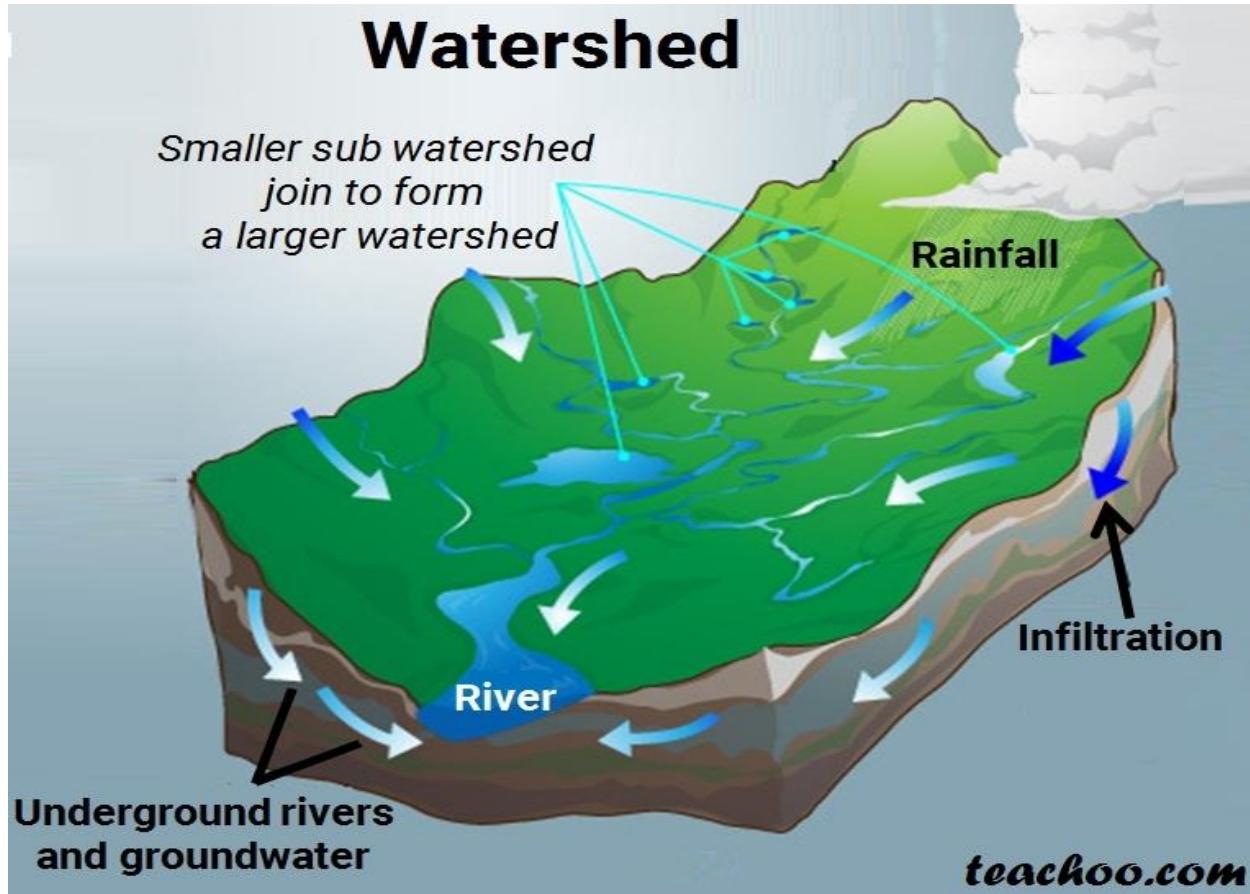


The graded long profile and typical cross section of a river from source to mouth

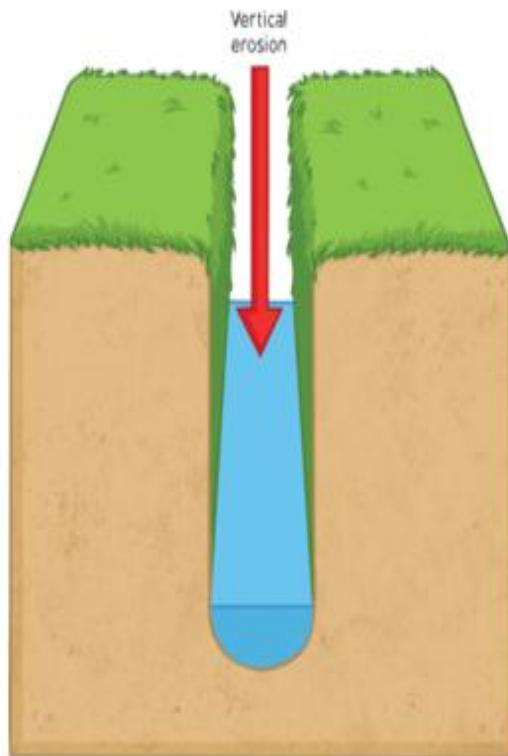
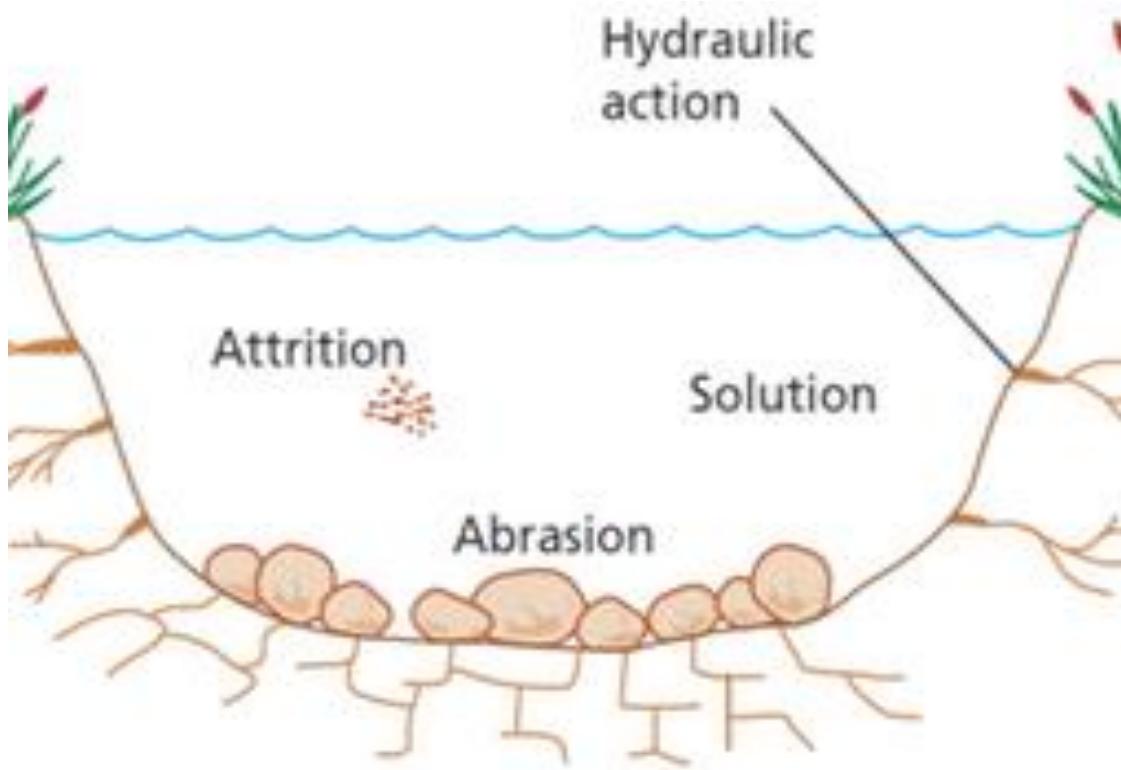




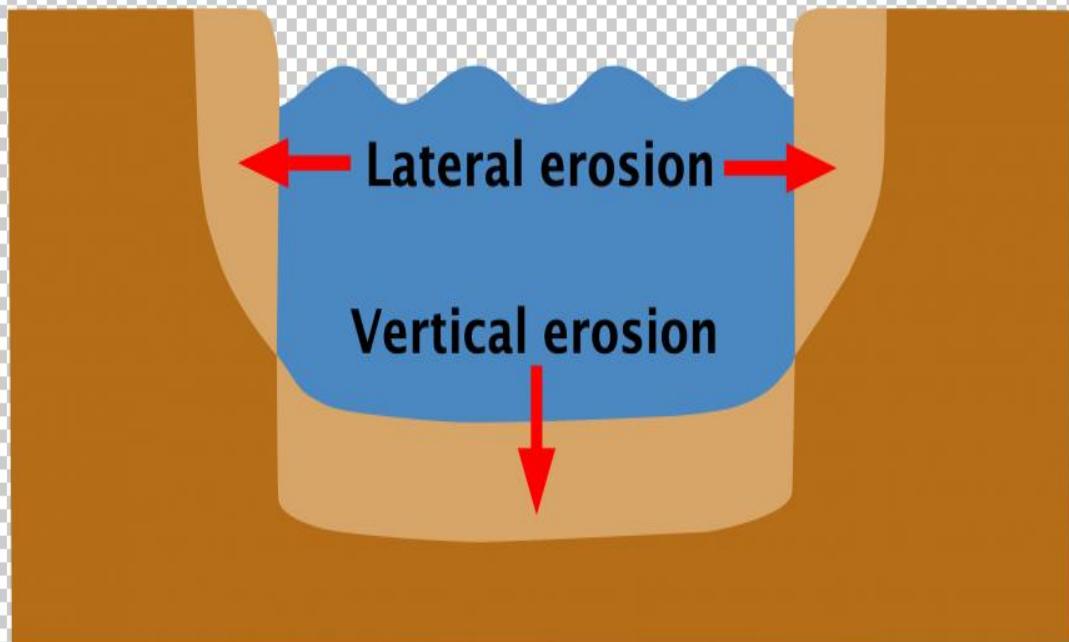
# Watershed



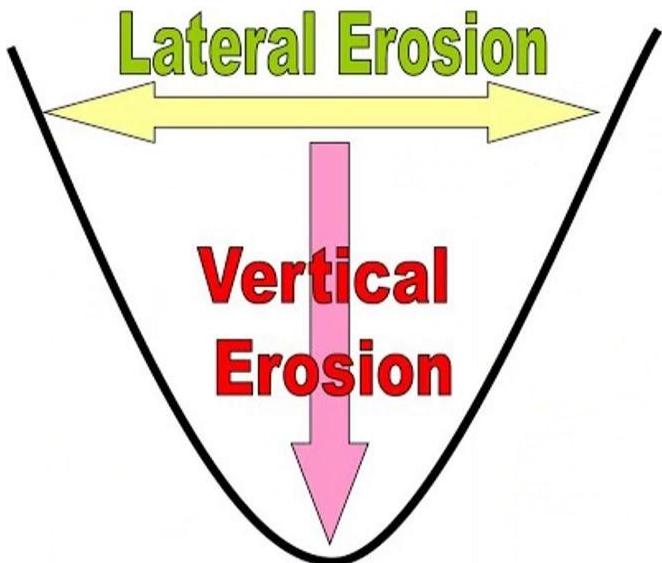
## WORKS OF A RIVER



# Lateral and vertical erosion

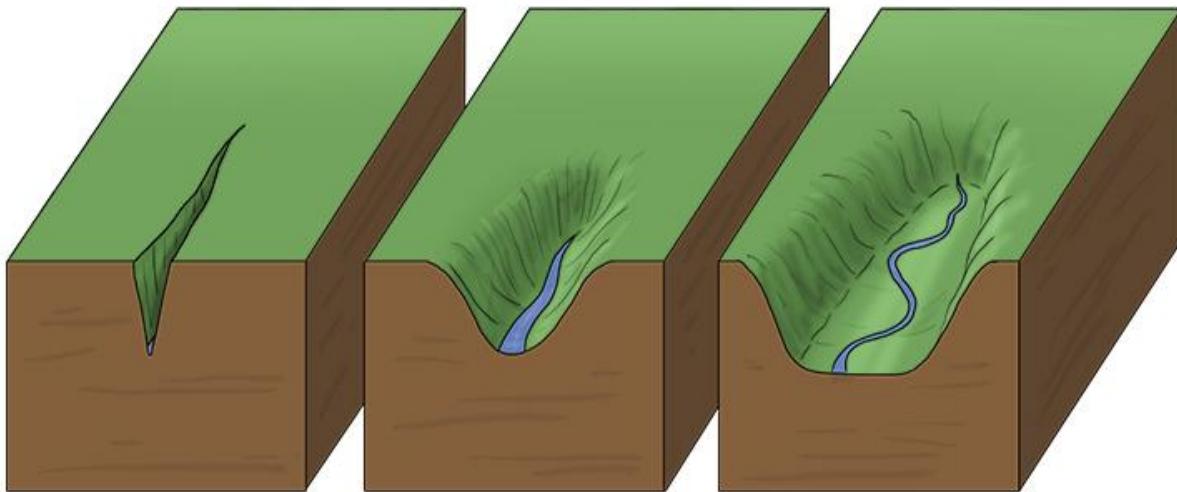


 internet geography



Upper course – river does not have enough energy to erode the land laterally (sideways) so erodes almost entirely vertically.

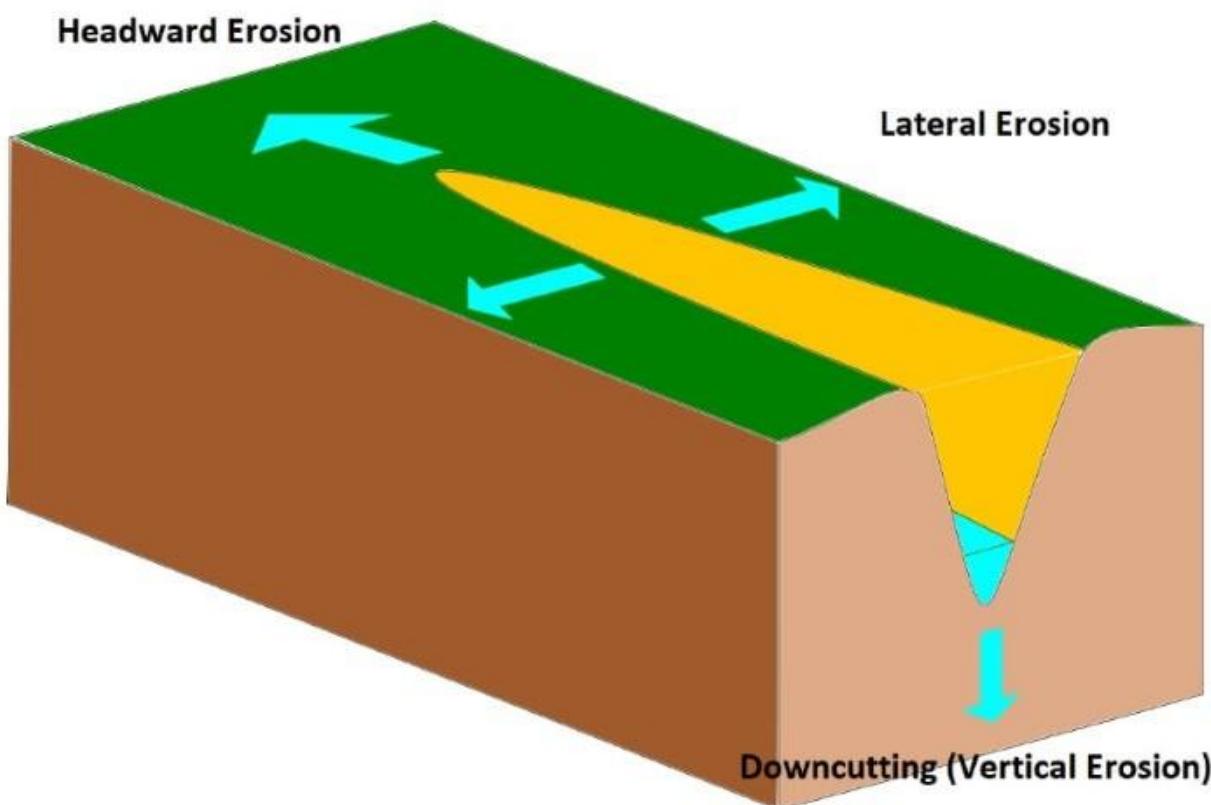
In the lower course vertical erosion continues however the river can also erode sideways leading to a changing channel location



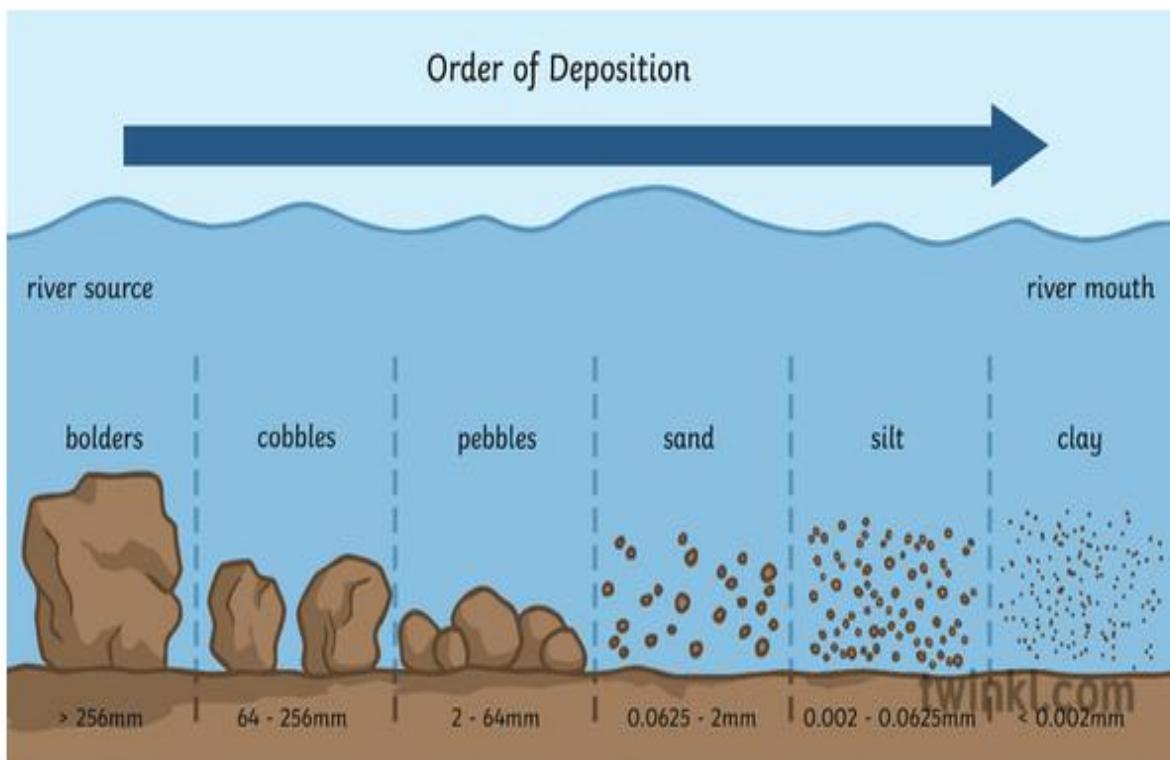
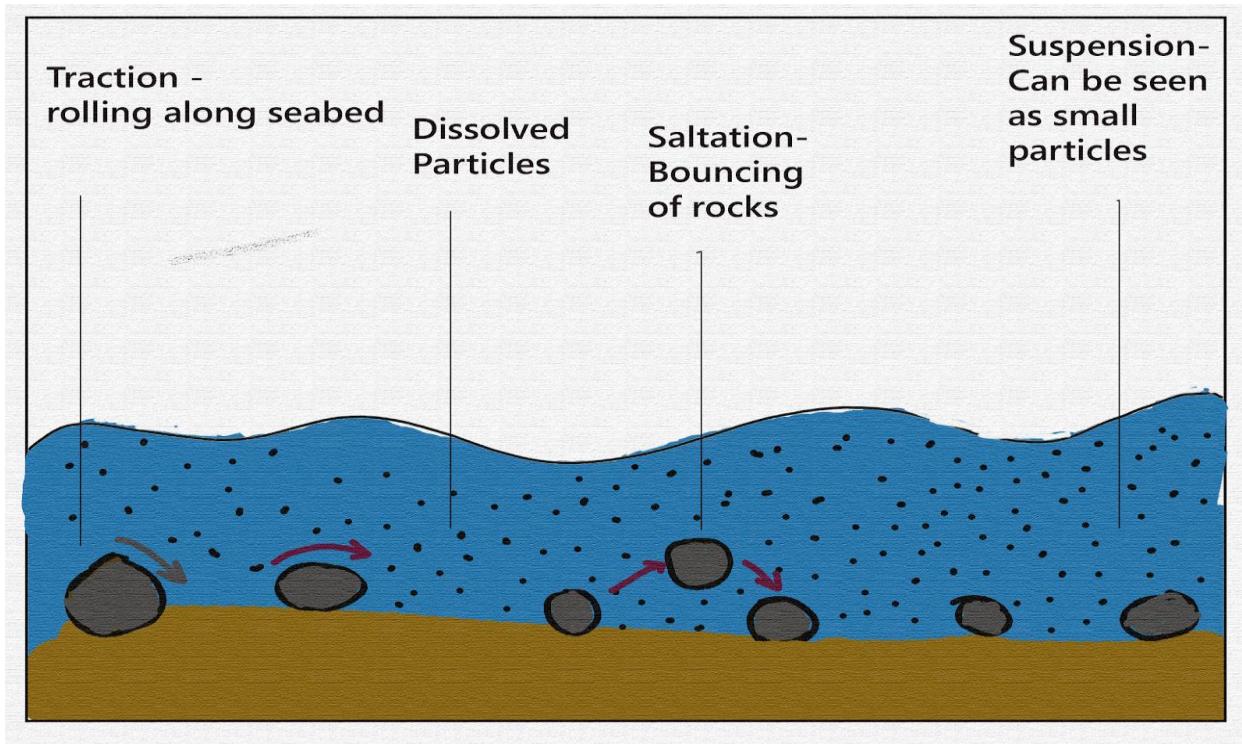
The vertical erosion  
of the river,  
shaped like a 'V'

The river widens  
as the vertical  
erosion gets deeper

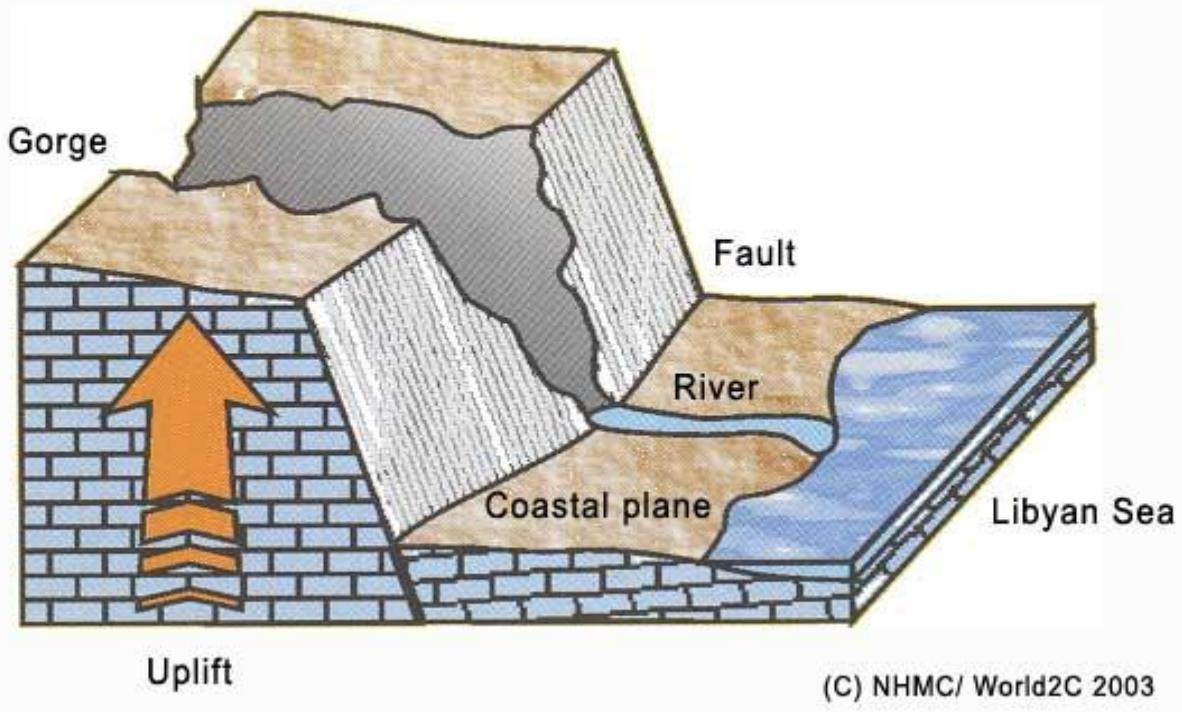
The valley widens  
as the river meanders



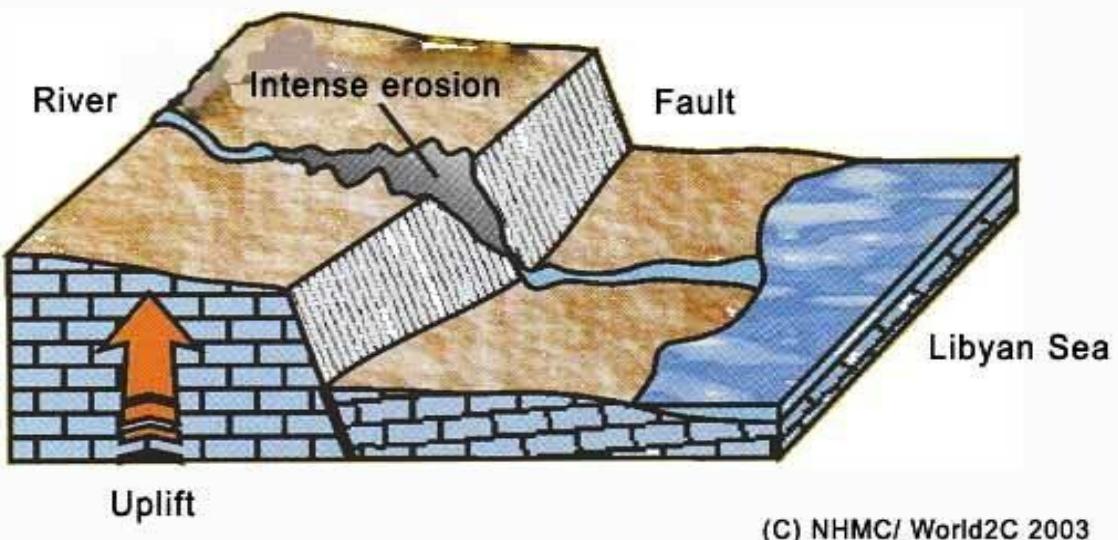
## RIVER DEPOSITION PROCESSES



## RESULTANT YOUTHFUL STAGE LANDFORMS



**A Gorge**



**A Gorge**



**A Gorge: Murchison falls**



**A Gorge: Murchison falls**



**A Gorge: Victoria falls in Zimbabwe**



**A Gorge**



**V – Shaped Valley**



**U – Shaped River Valley**



## **U – Shaped River Valley**

## **WATERFALLS**



## **Murchison falls**



**Sipi Falls**



**Sipi Falls**



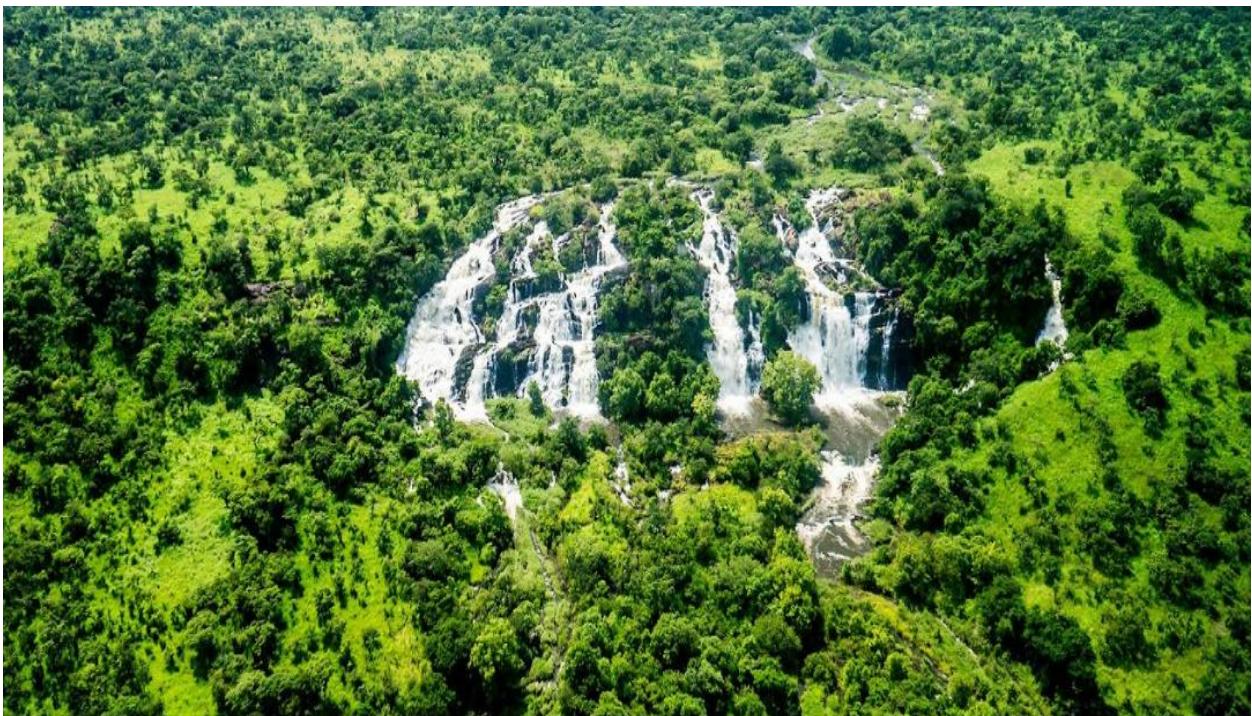
**Karuma Falls**



**Aruu Falls in Pader District**



**Aruu Falls in Pader District**



**Aruu Falls in Pader District**



**Wanale Falls: Mt.Elon**



**Wanale Falls: Mt.Elon**



**Mpanga falls: Amabere caves at Nyakasura**



**Murchison Falls in Masindi District**



**Niagara Falls in USA**



**Sezibwa falls in Lugazi, Buikwe District**



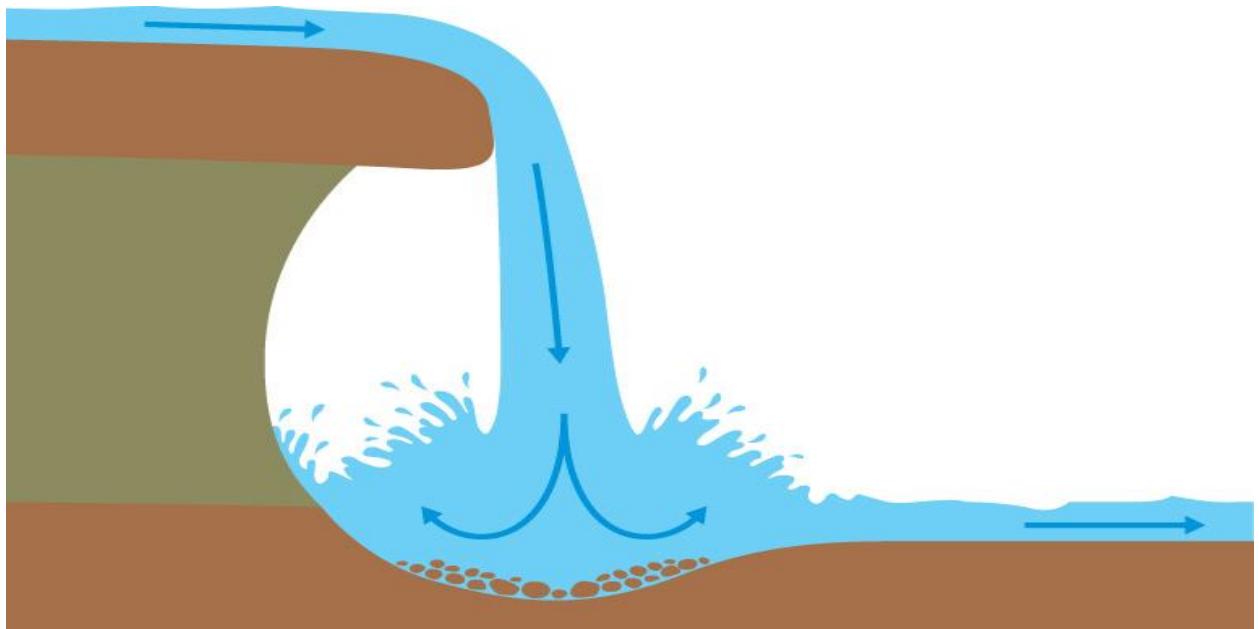
**Bujagali falls in Jinja**

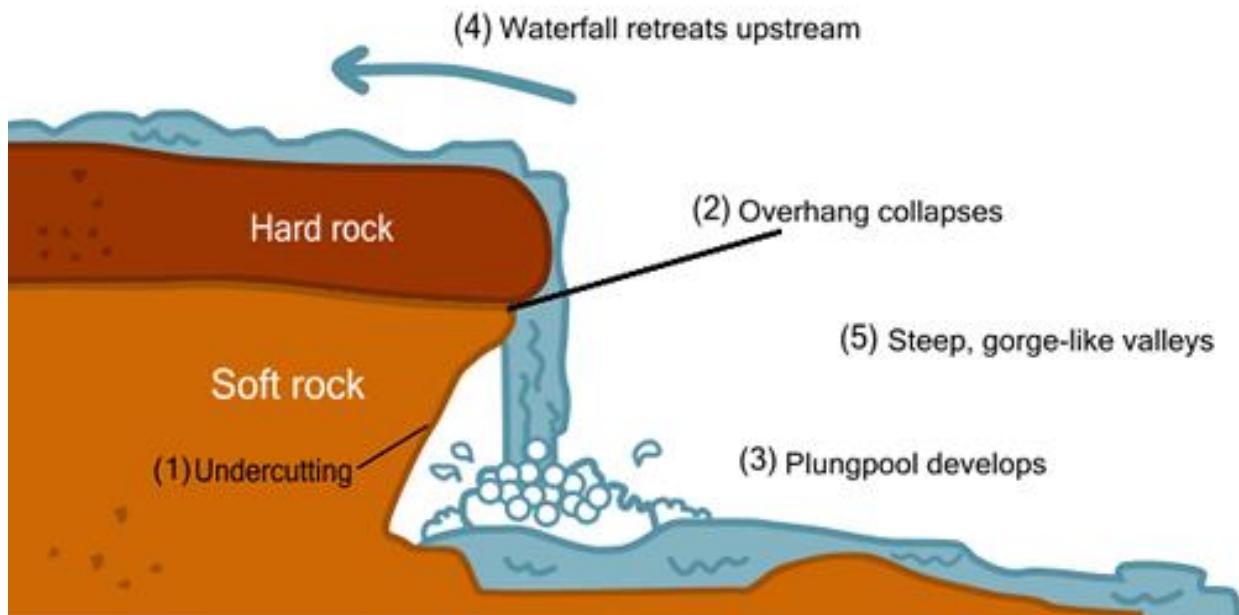


**Bwindi falls on River Munyaga**



Rapids





**Plunge pool**



**Plunge Pool**



**Potholes**

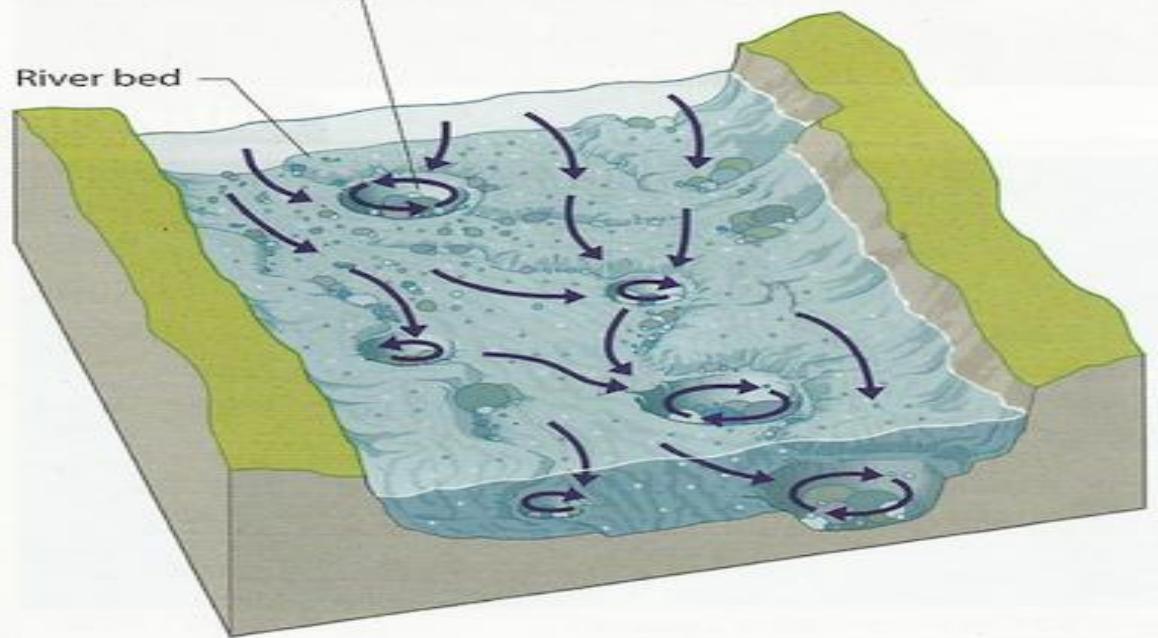


**Potholes**



**Potholes**

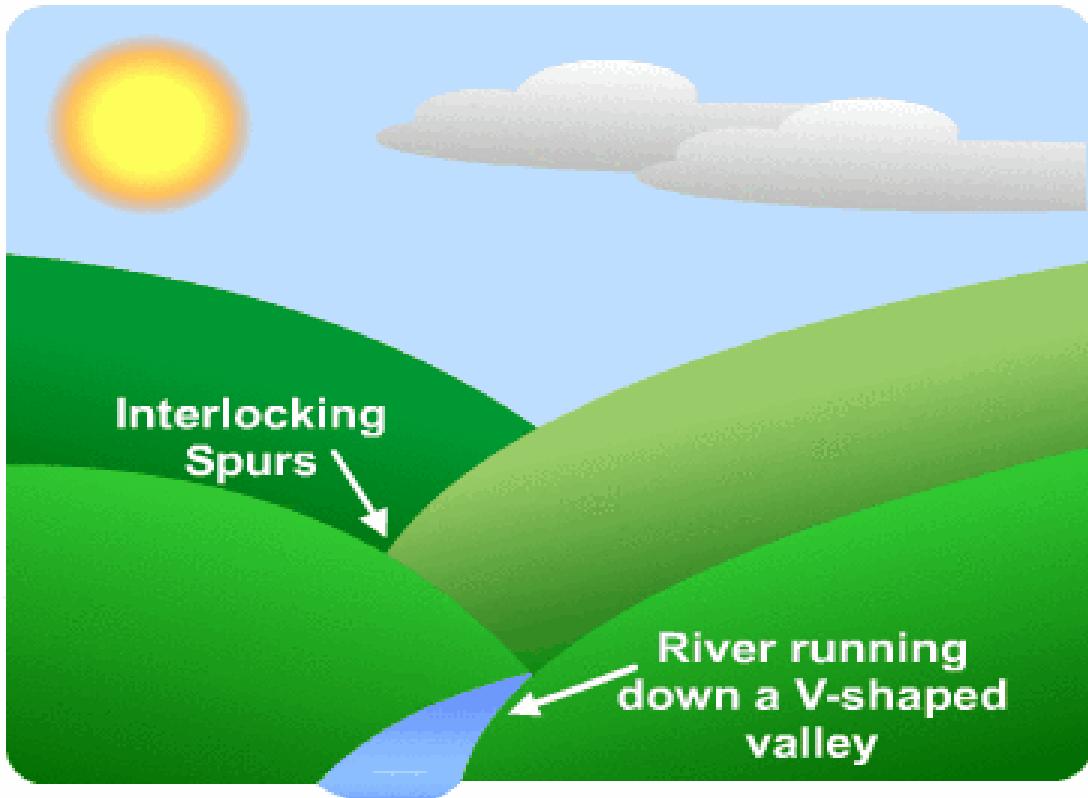
Swirling water and bed load fall into a slight depression and turn it into a cylindrical hole called a pothole



## Formation of Potholes



## Potholes



**Interlocking Spurs**



## Interlocking Spurs



More  
resistant  
geology

Winding river

## Interlocking Spurs

## **FEATURES IN THE MIDDLE STAGE**



**River Meander**



**River Meanders**

## **FEATURES IN THE OLD STAGE**



**Ox Bow Lake**



**Ox Bow Lake**



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### Ox Bow lake



### Ox Bow lake



**Ox Bow lake**



**Ox Bow lake**



**Meandering River & Ox bow lake**



**Meandering River & Ox bow lake**



**Meandering River**



**Meandering River**



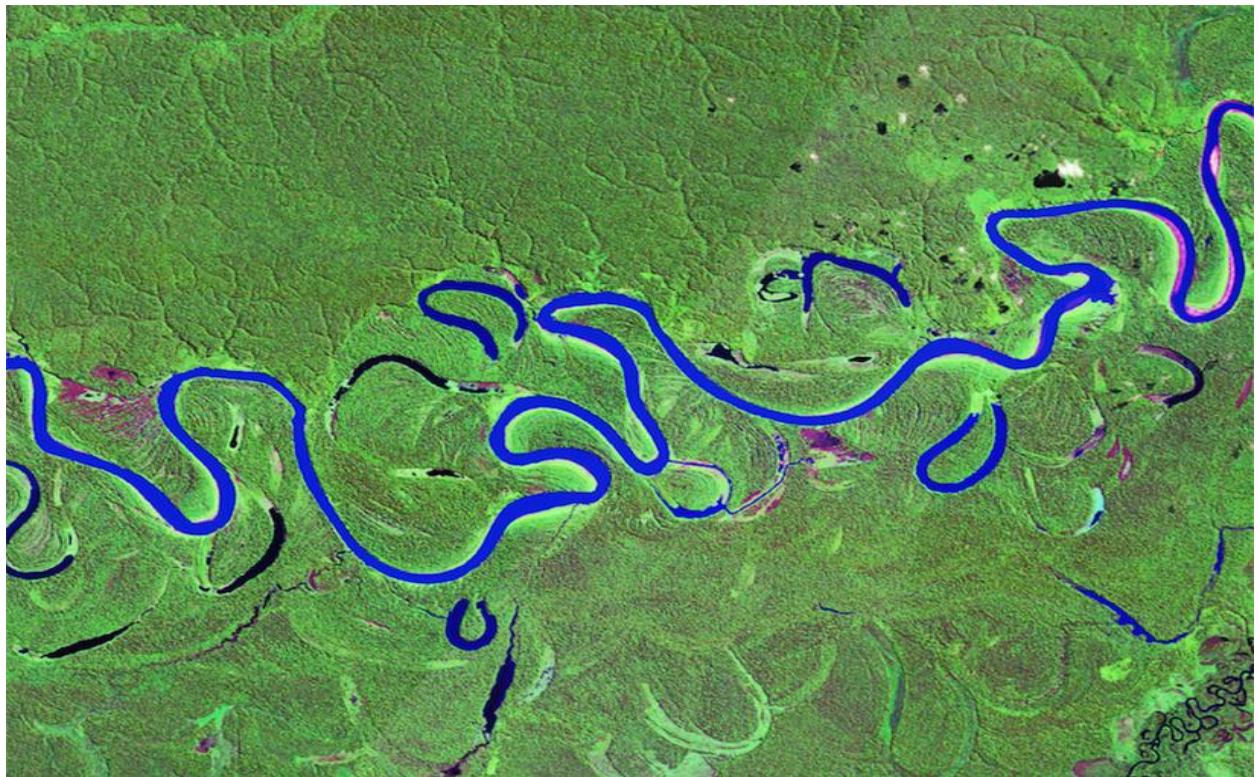
**Meandering River**



**Meandering River**



**Meandering River & Ox bow lake**



**Meandering River & Ox bow lakes**



**Levees**



**Levees**



**Levees**



**Flood plain**



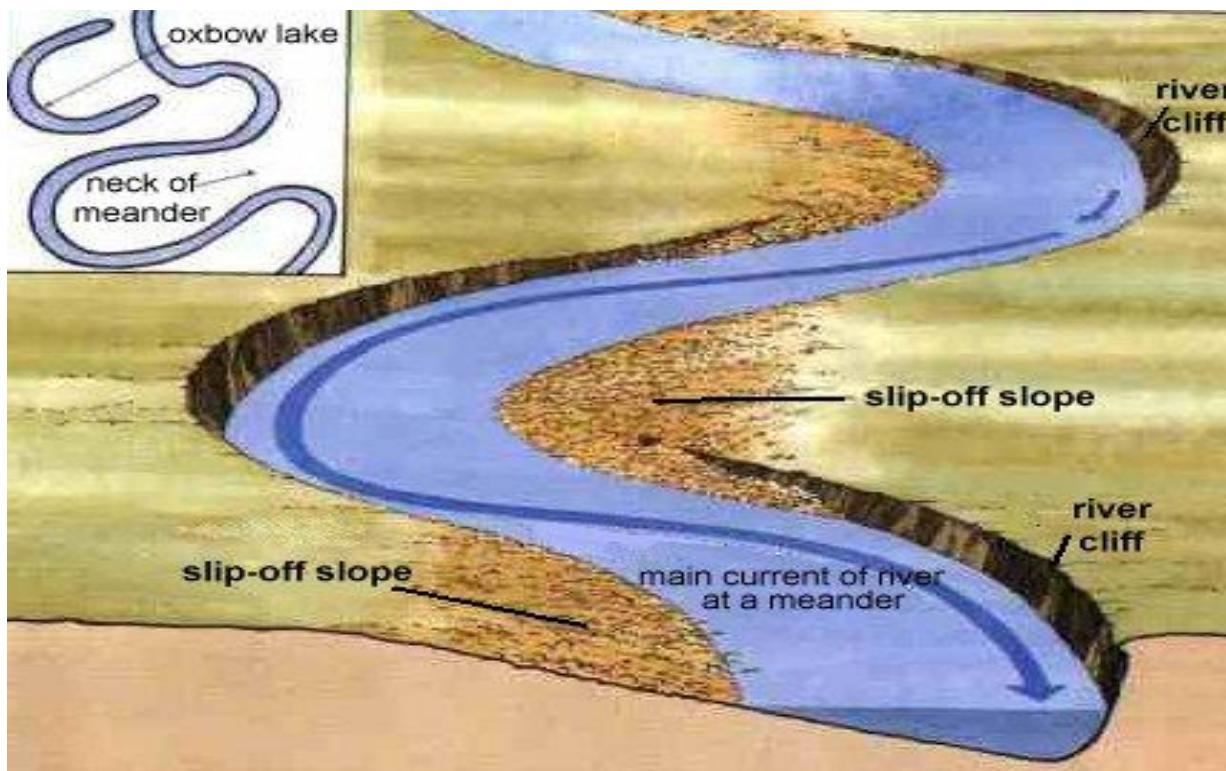
**Flood plain**



**Flood Plain**



## Flood Plain

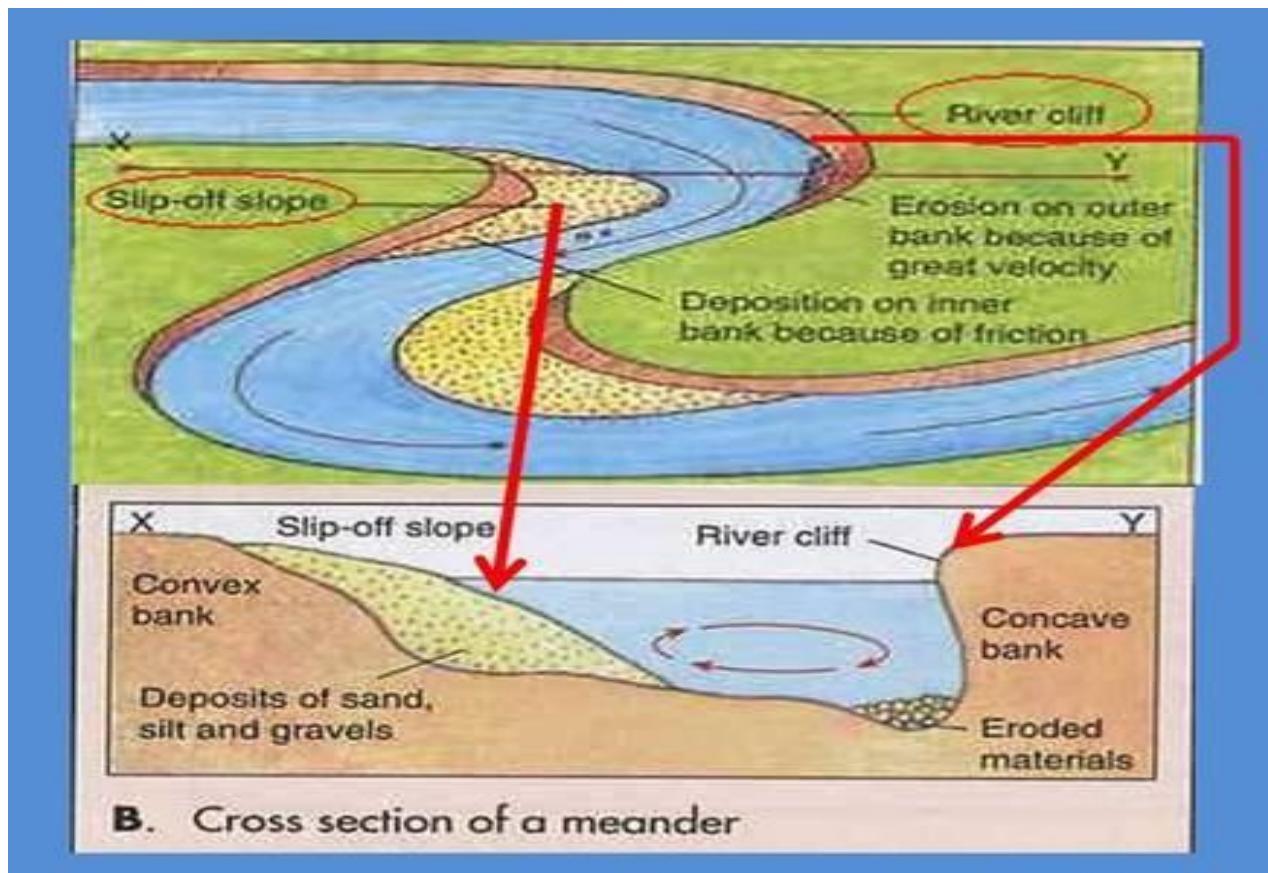




**River Slip off slope & River Cliff**



**River Cliff & Slip off slope**



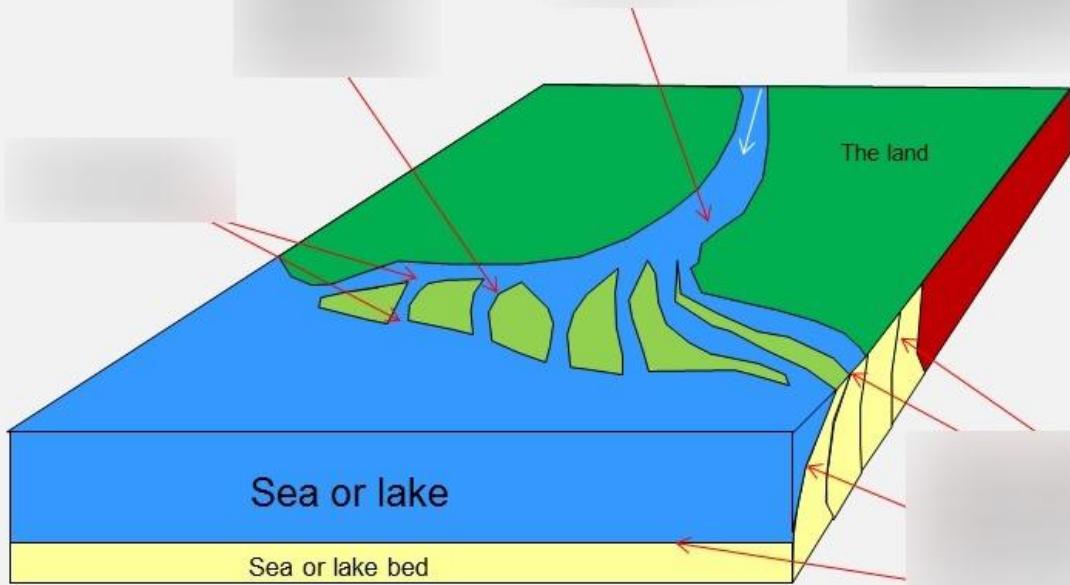
**Meandering River**



## Mediterranean Sea



## The formation of Deltas



By Rob Gamesby



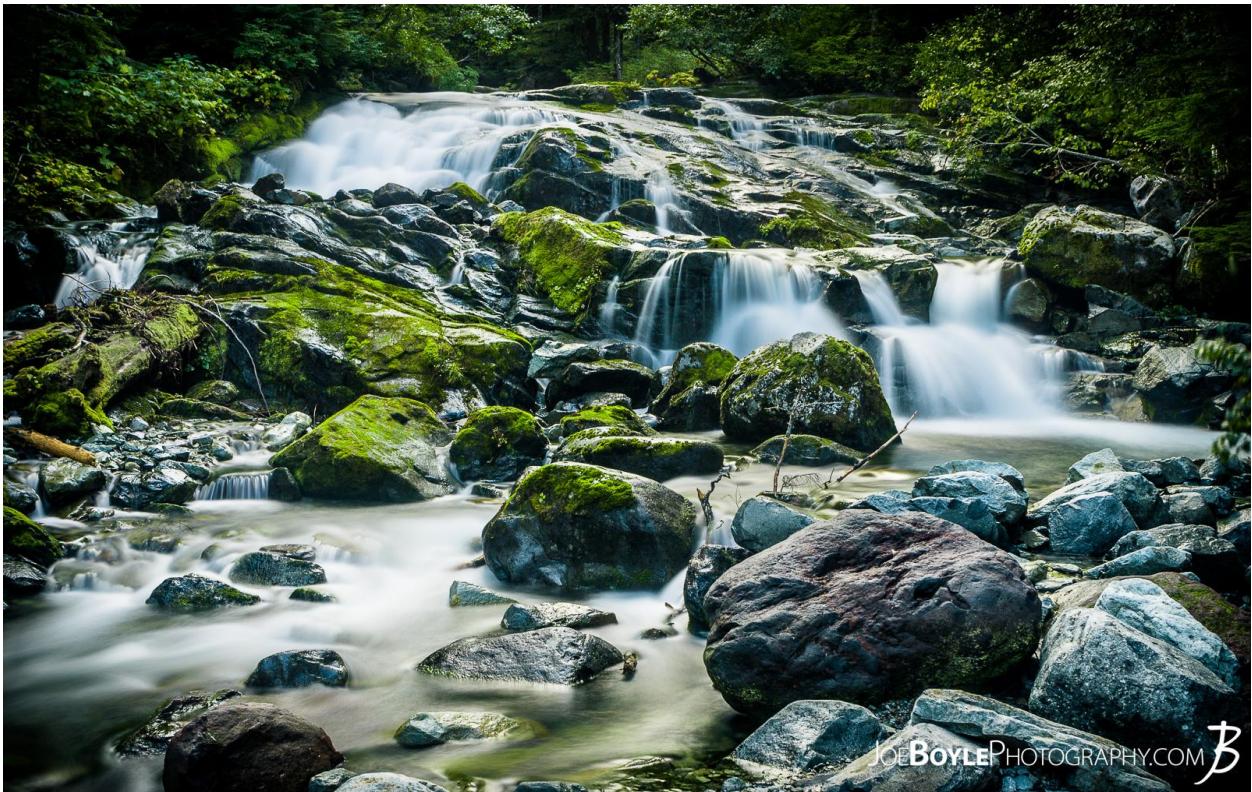
**Delta**



**Delta**



**Delta**



**Cataract: Series of waterfall.**



**River Cliff**

**THE END**