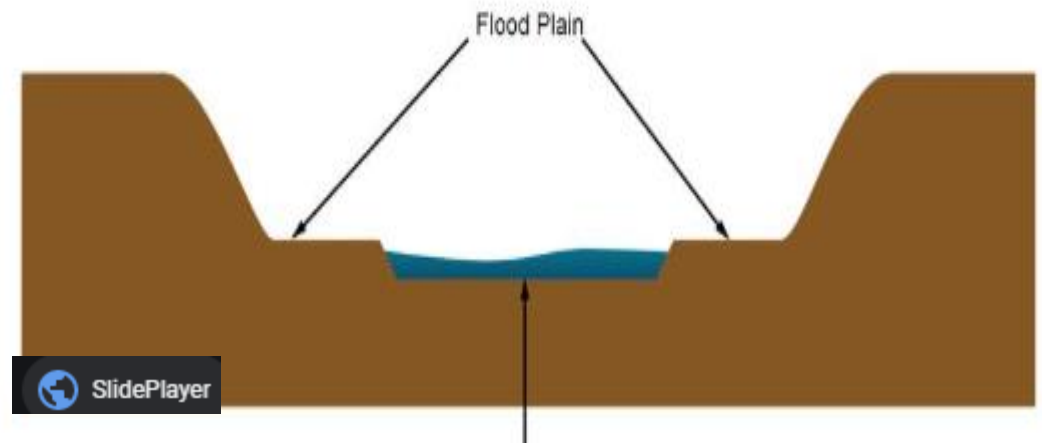
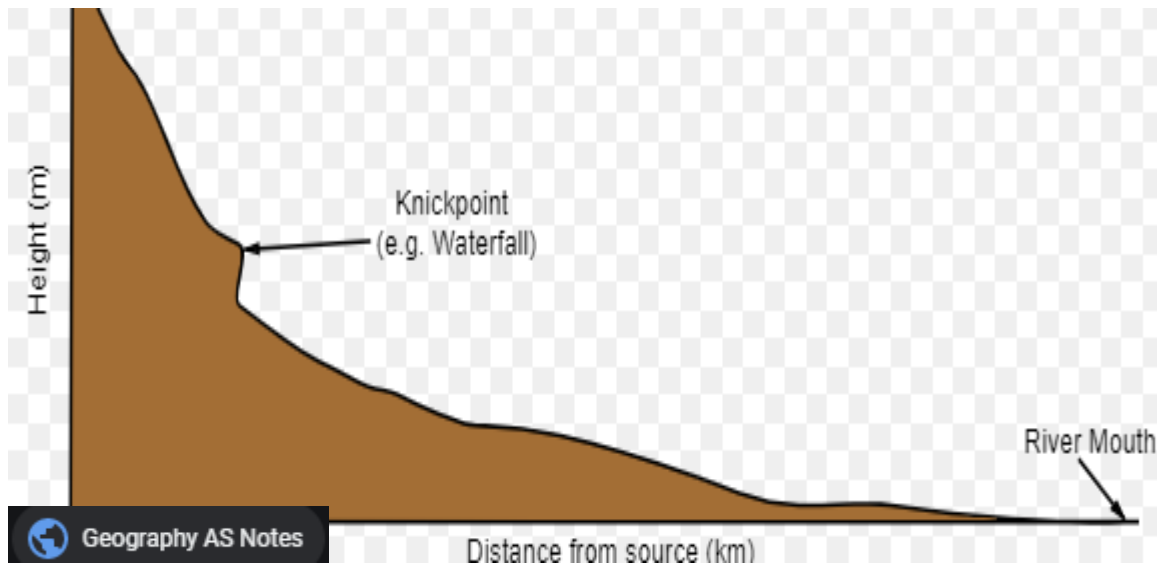




GEOMORPHOLOGY



RIVER PROFILES

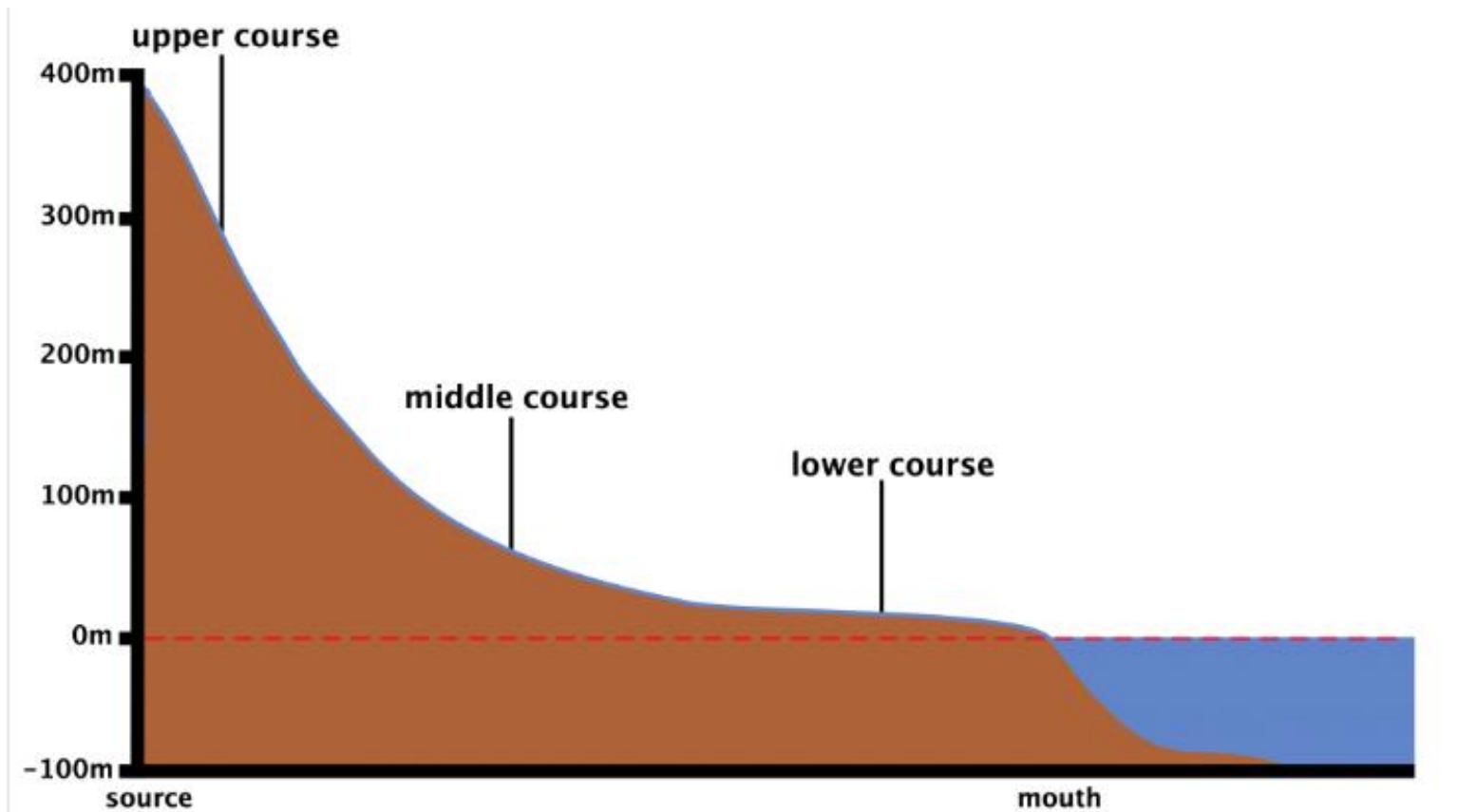


River profiles:

- Definition, description and associated characteristics
- Cross/Transverse profile
- Longitudinal profile
- Relationship of both profiles to the stages of a river (upper, middle, lower course)



LONGITUDINAL PROFILE



Source: Internet Geography

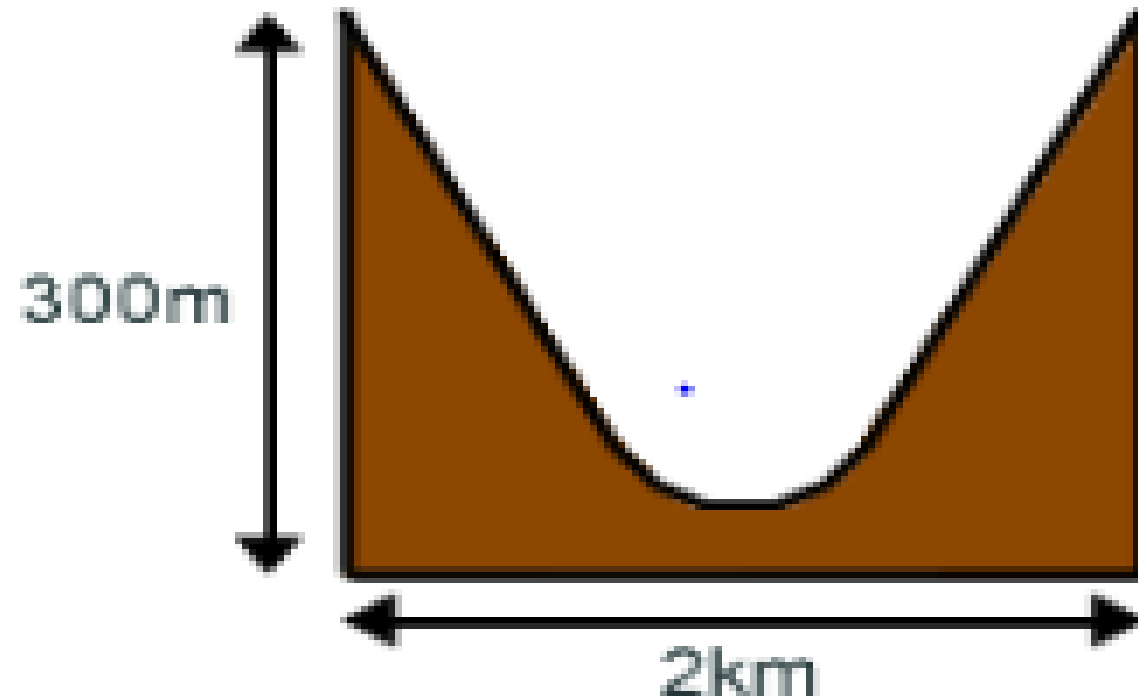


It is the side view of a river showing the path of the river from the source to the mouth

- Concave in shape
- Steep at the source and gentle at the mouth



Cross/Transverse profile



Source: Internet Geography

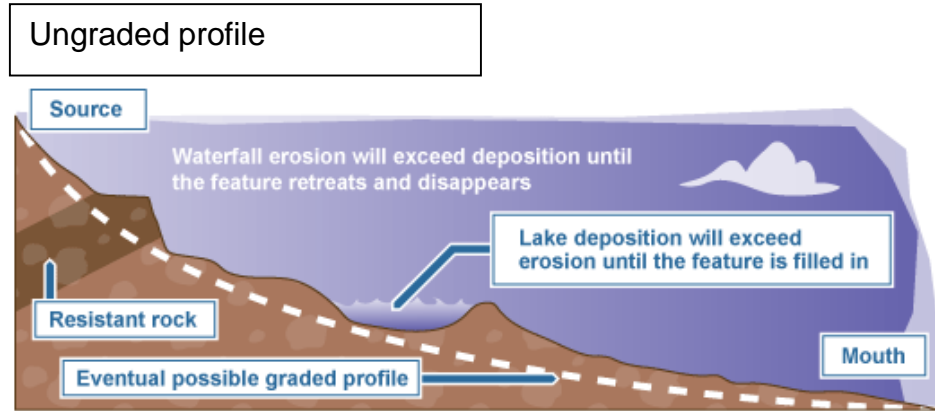
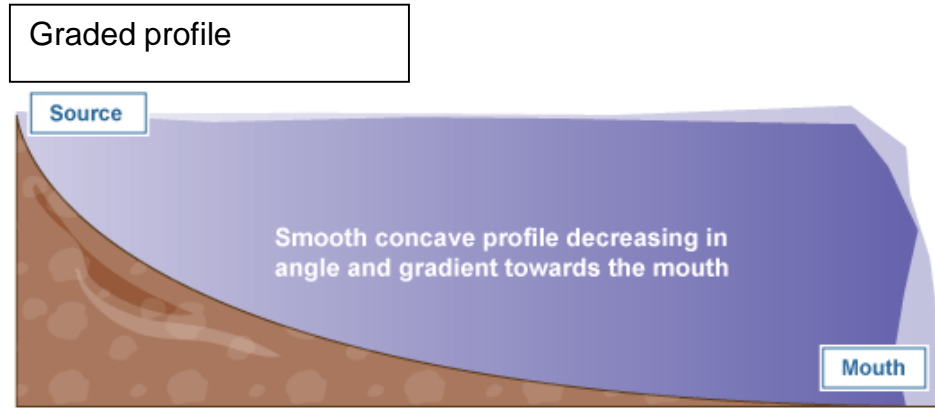


Shows the cross view of a river from bank to bank.

- Can view the width, height and level of water



GRADED PROFILE



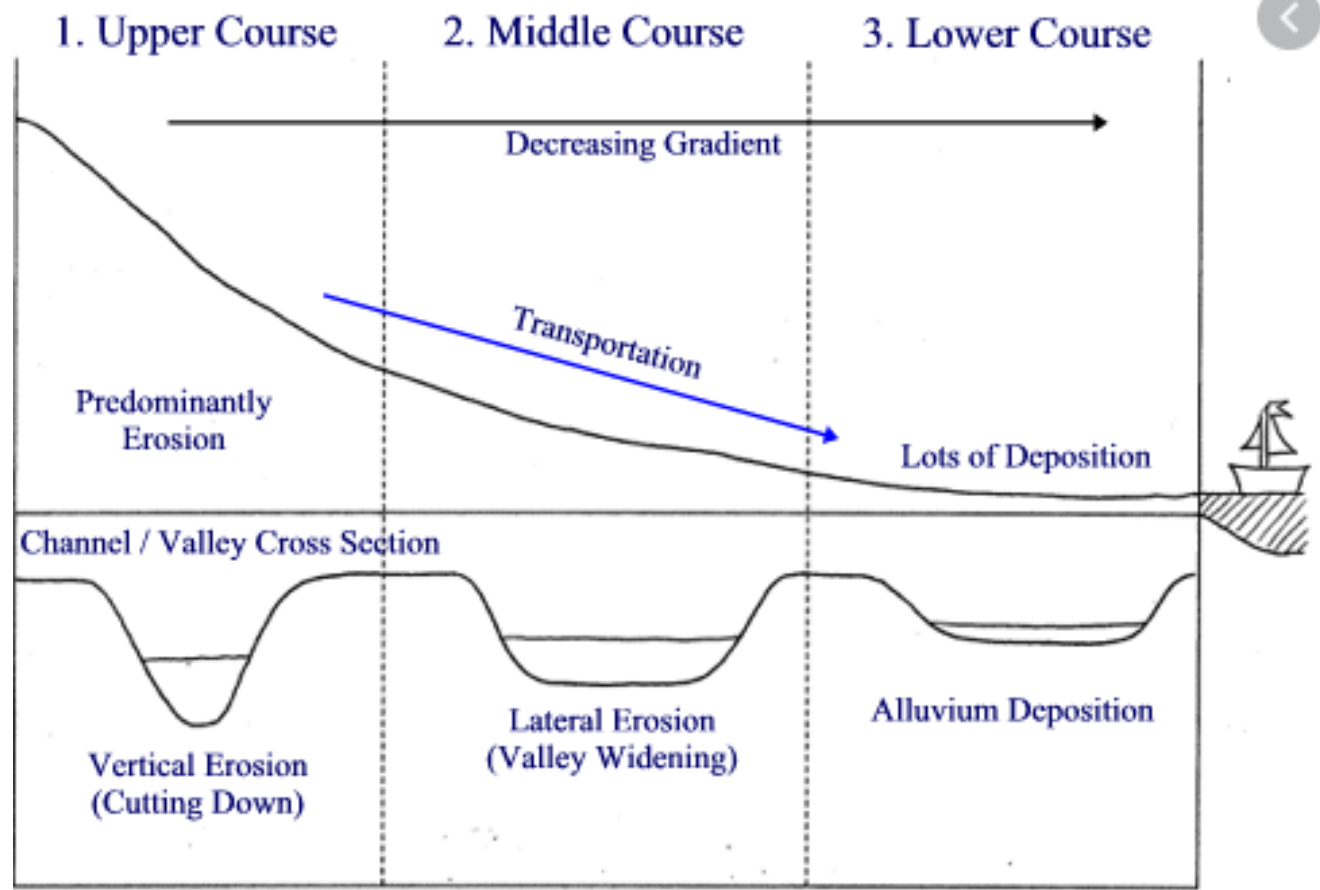


Graded profile

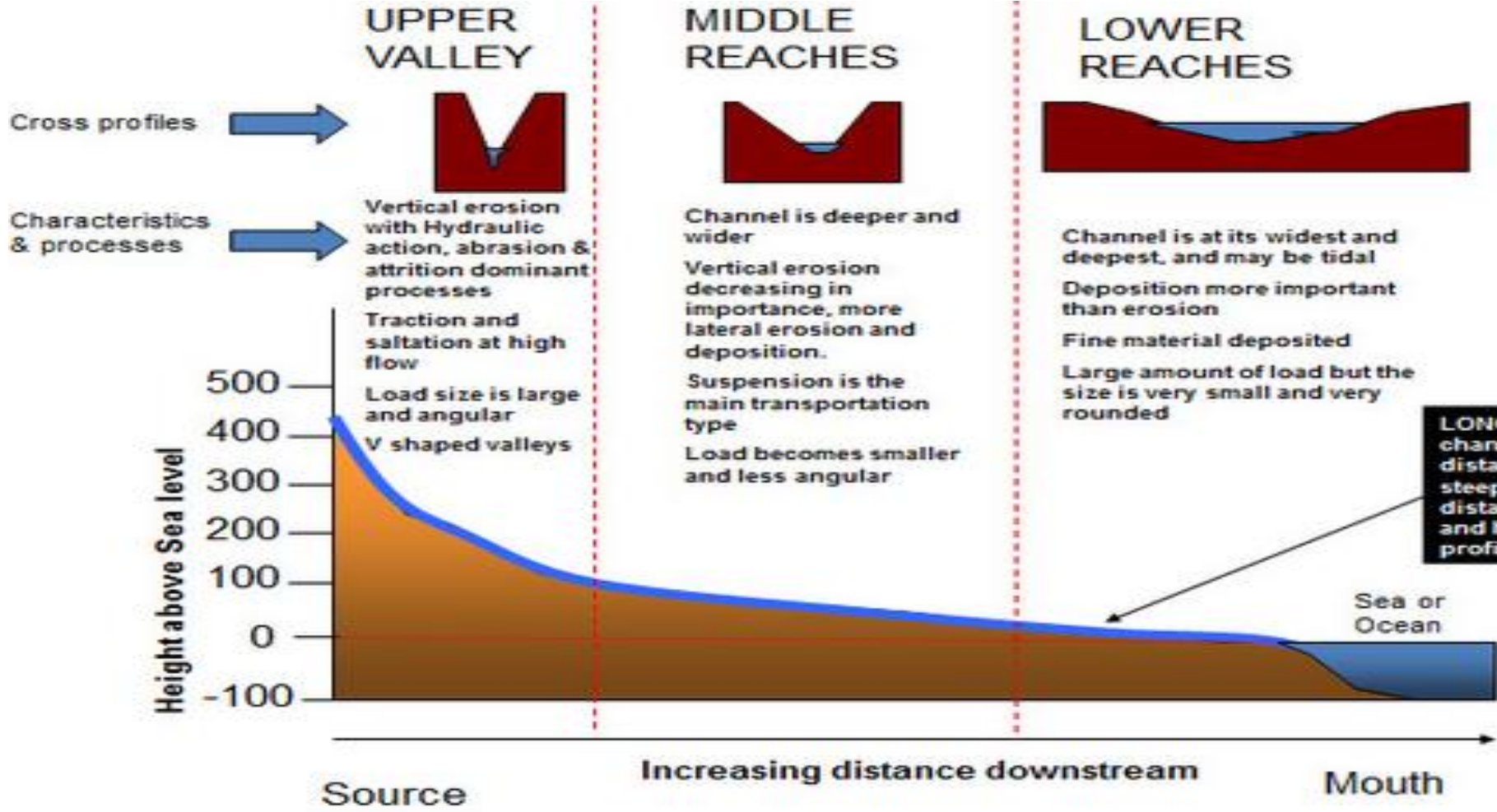
Is a smooth concave profile which is steep at the source and gentle at the mouth. It has no obstructions/knickpoints

Ungraded profile

Is a river profile that has irregularities/obstruction/temporary base levels along its path
(It is not smooth)



Source: Geo41.com

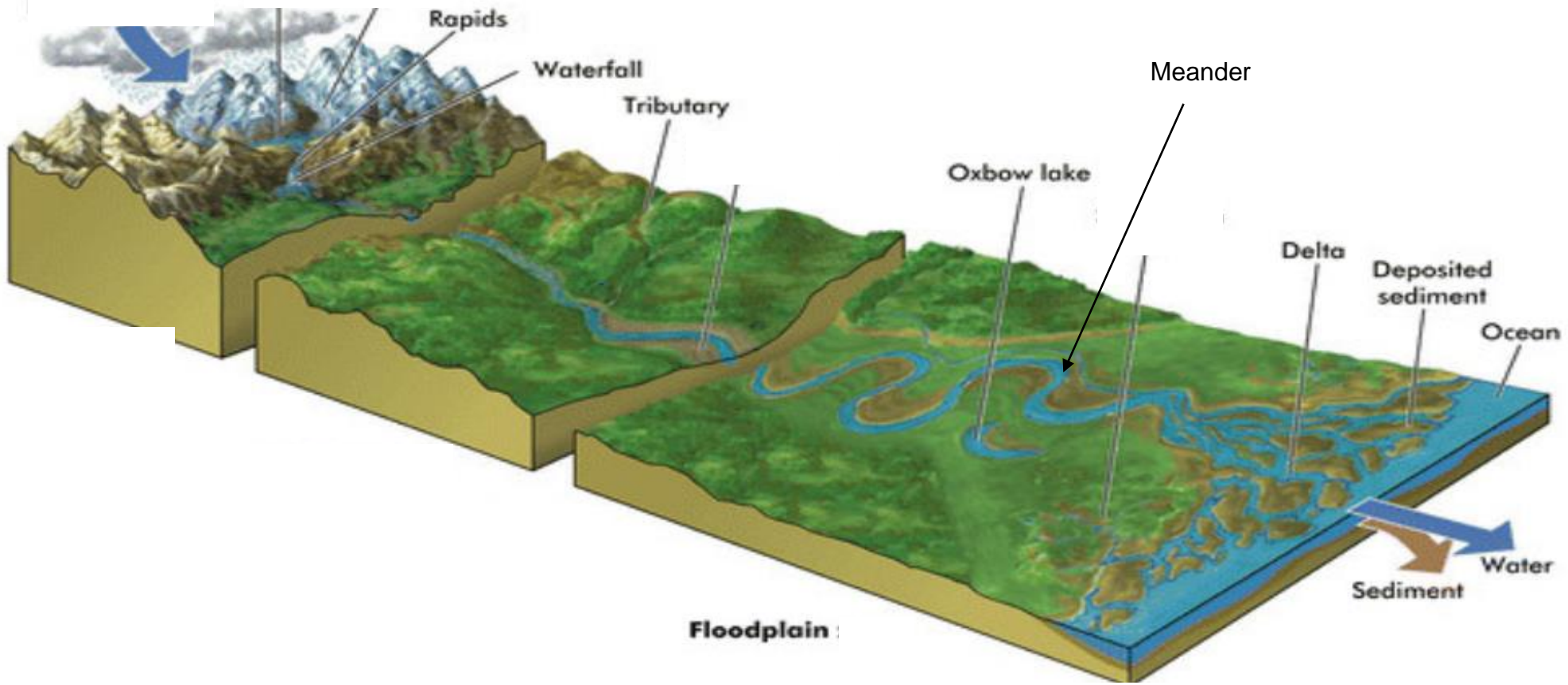




The transverse profile of the river channel changes throughout the course of the river. In the upper section the channel tends to be quite narrow, and comparatively deep. (vertical erosion dominates)

In the middle course of the river has a wider channel, which is deeper than the one in the upper reaches, and the water flows faster, as it has less material to slow it down. (lateral erosion dominates)

The lower course the channel is very wide, deep in places where the water is flowing quickest, and is smooth sided. (deposition dominates)



Floodplain :