



RIVERS AND THE DRAINAGE OF EAST AFRICA.

A river is a body of water in a defined channel from its source to mouth.

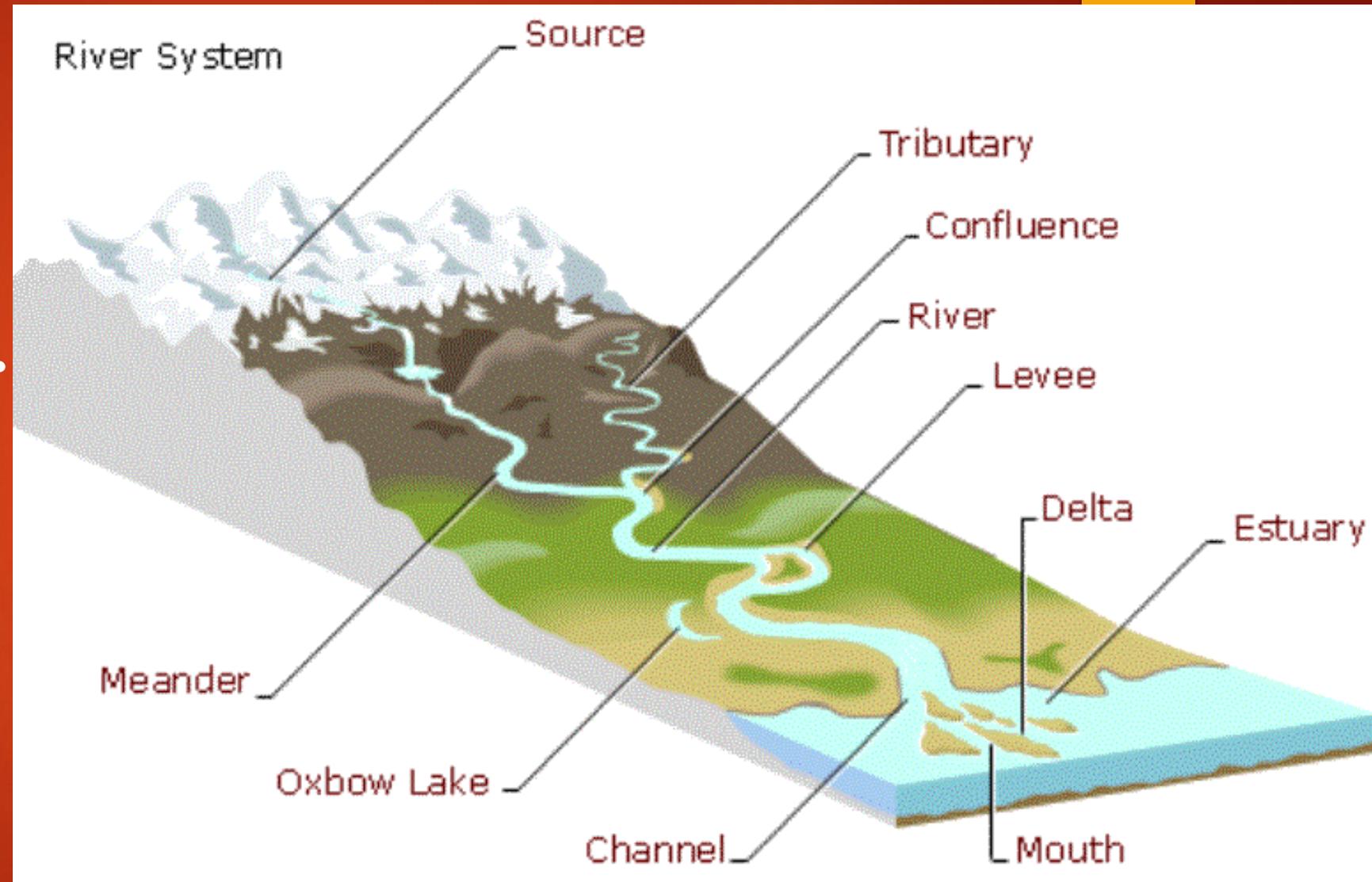
Normally, rivers flow from highland areas to low land areas.

In studying rivers, the following terms are very important;

River source.

This is a place where a river originates from.

It can be a mountain, a lake or swamp.



River mouth.

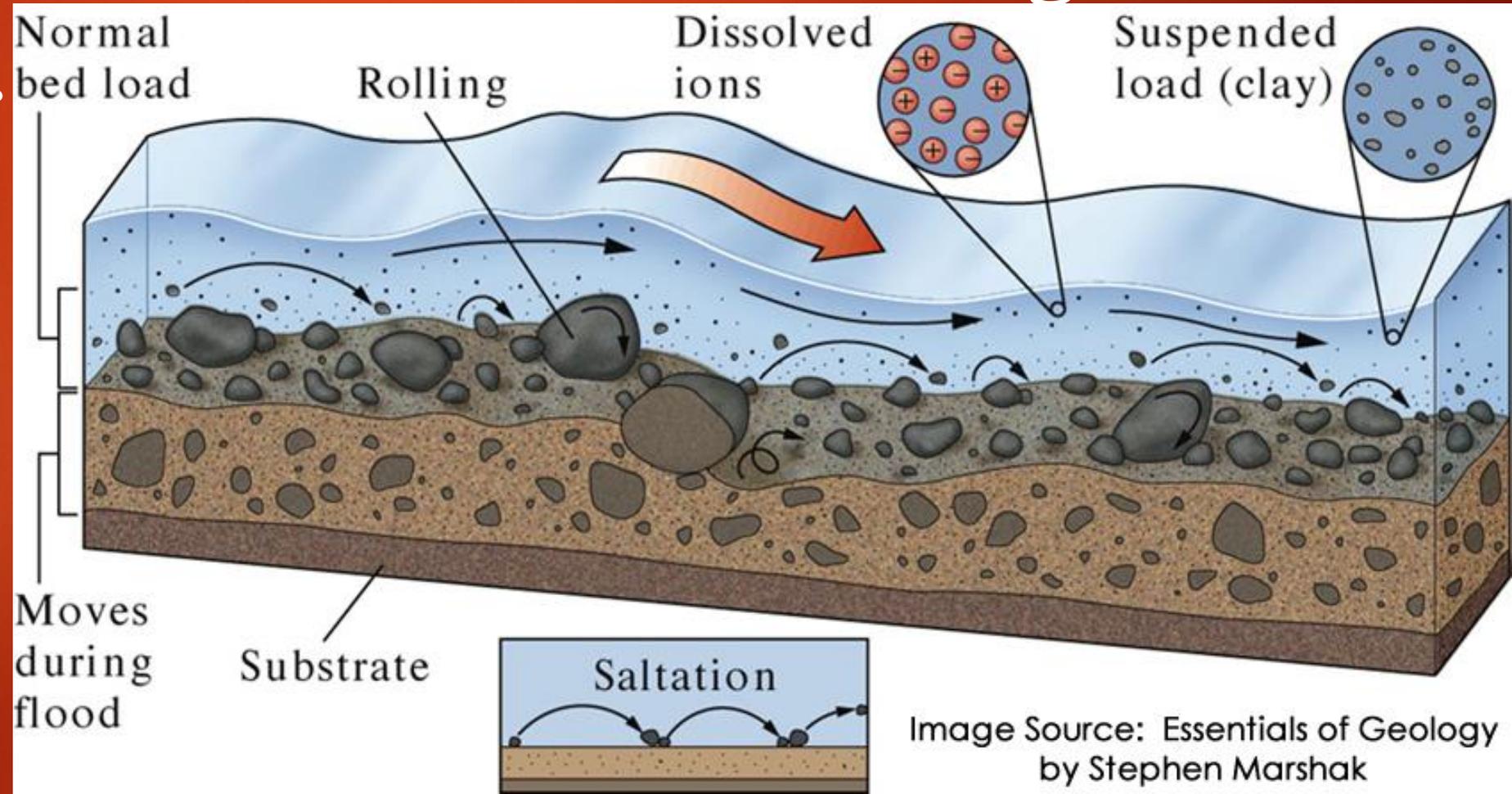
This is a place
where a river
pours its water.

It can be an
ocean, a sea,
lake or swamp.



River load.

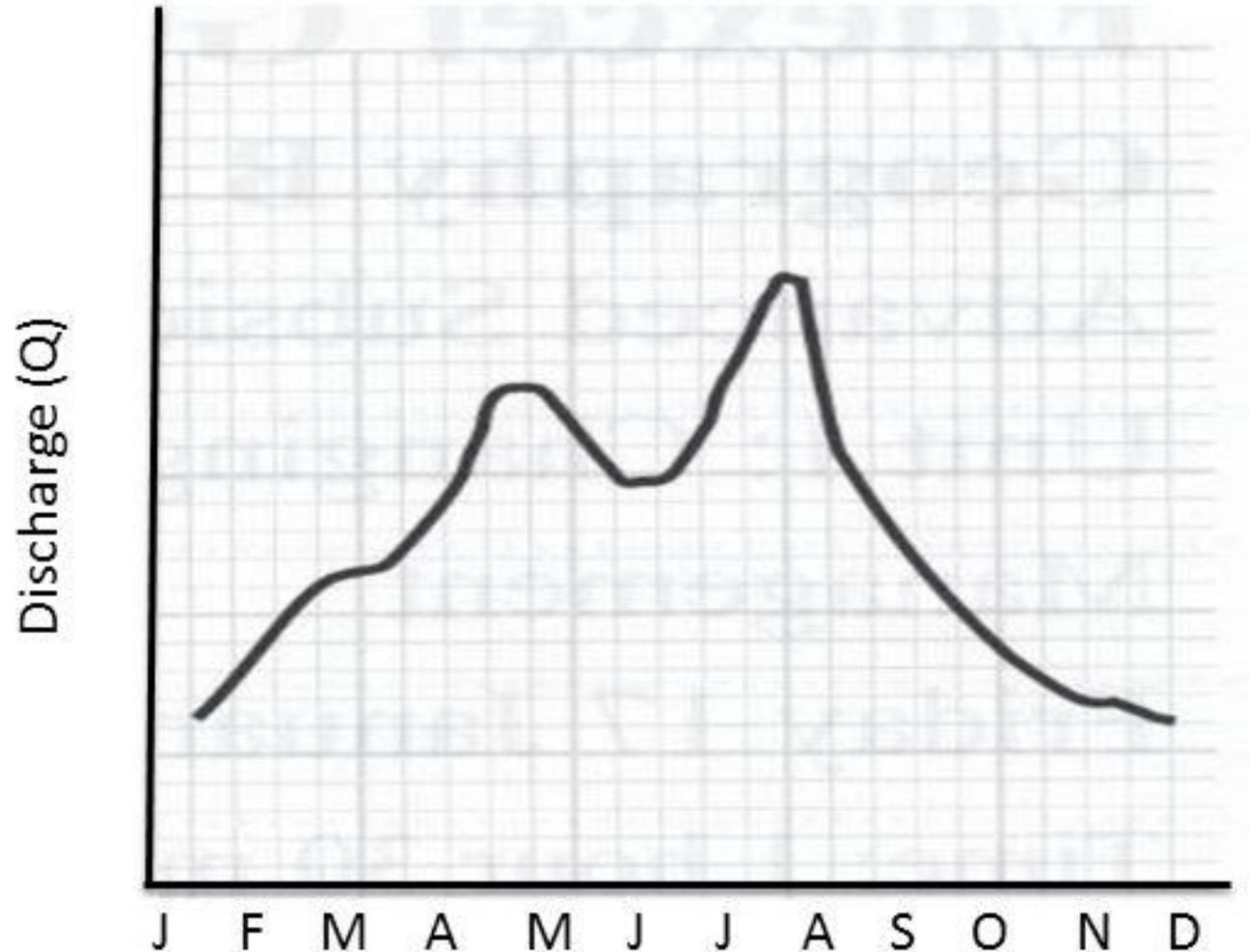
This is the material carried by a river from its source to mouth. It can be boulders, gravel, sand, silt etc.



River regime.

This is the seasonal variation in the volume/level of water in a river.

River Regimes



River volume.

This is the amount of water carried by the river.



Tributary.

A smaller river that joins the main river at a given point.



Distributary

- A small river that leaves/branches off the main river



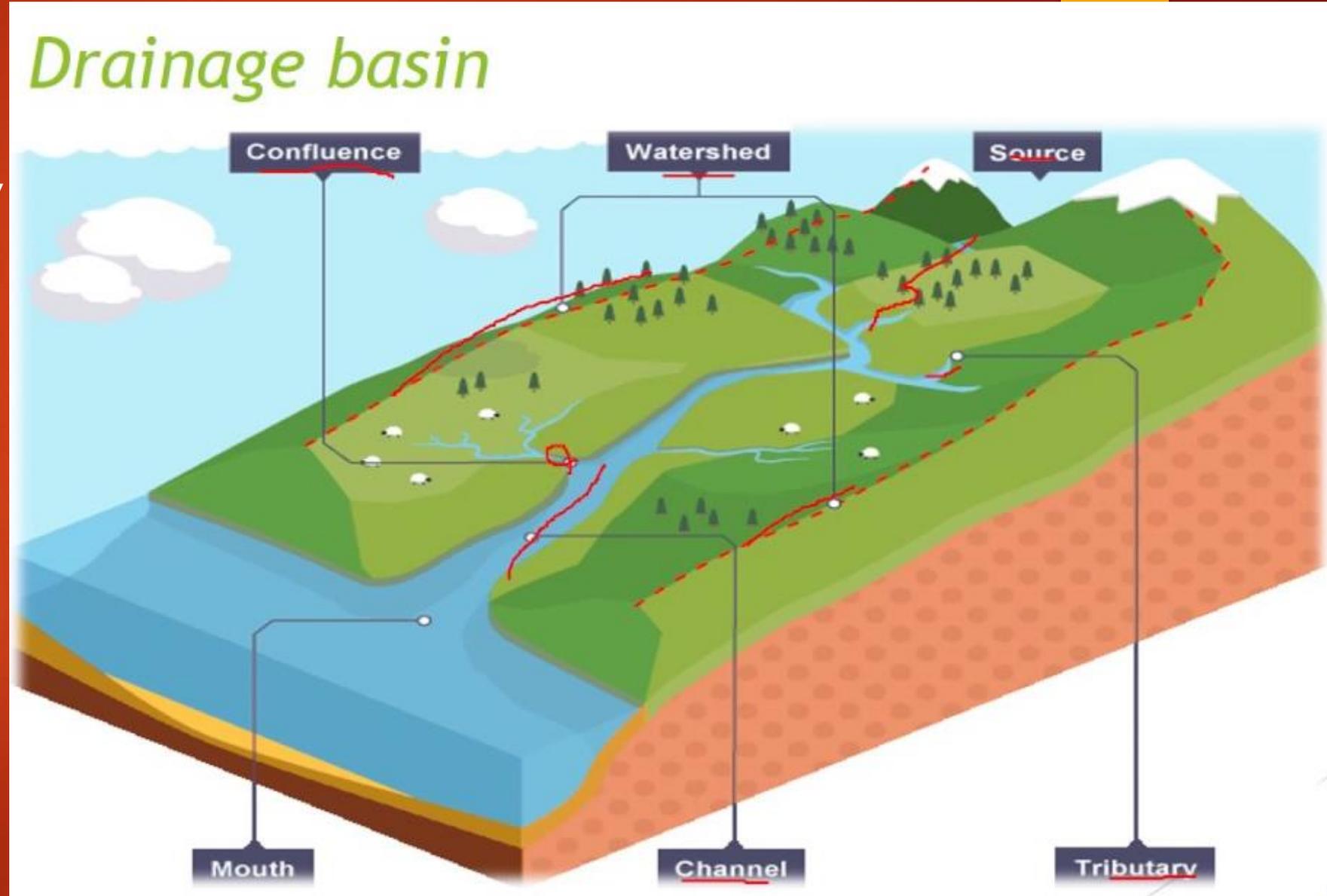
River confluence.

Is the point at which two rivers meet/divide.



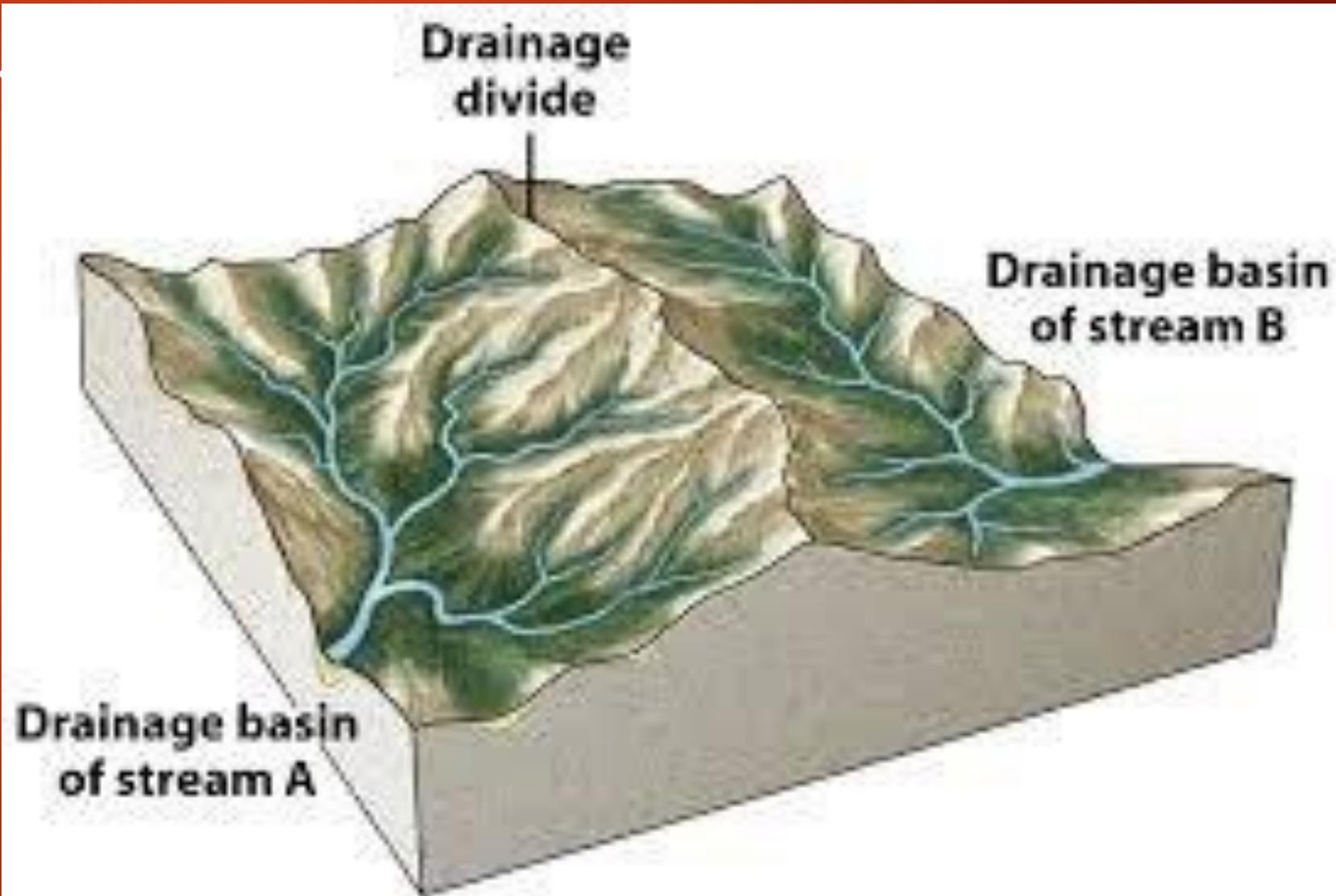
River basin.

An area drained by a river and its tributaries.



Divide / watershed.

This is an area of high ground separating two or more river basins.



River competence.

This is the ability of the river to carry its load.

As the river flows from its source to mouth, it performs three functions namely; erosion, transportation and deposition.

Stages in River Development.

Most rivers can be divided along their courses into three fairly distinct parts i.e. upper course, middle course and lower course. Some rivers have all three of these parts while a few have only one.

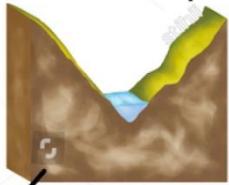
This cross section of a river from its source to its mouth is what is referred to as a river profile.

Upper course / mountain / youthful / torrent stage.

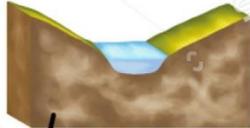
This is the stage in which the source of the river can be traced.

The majority of the rivers have their sources in the mountain areas. In this stage, the river has the following characteristics.

V-shaped Valleys



Middle Course



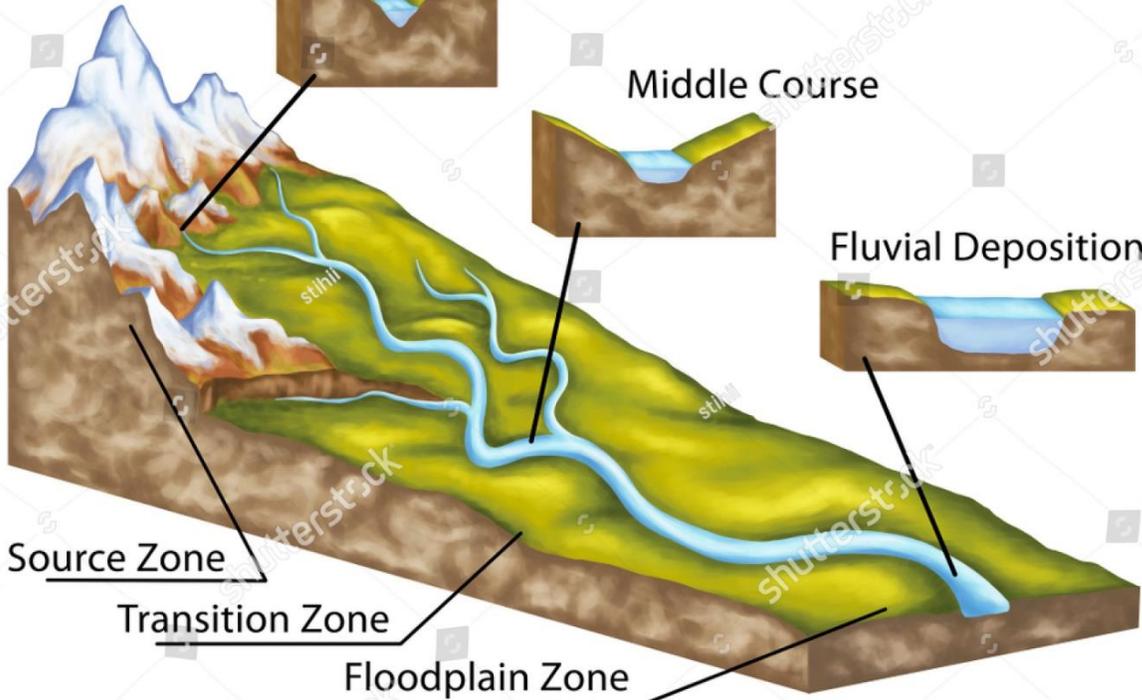
Fluvial Deposition



Source Zone

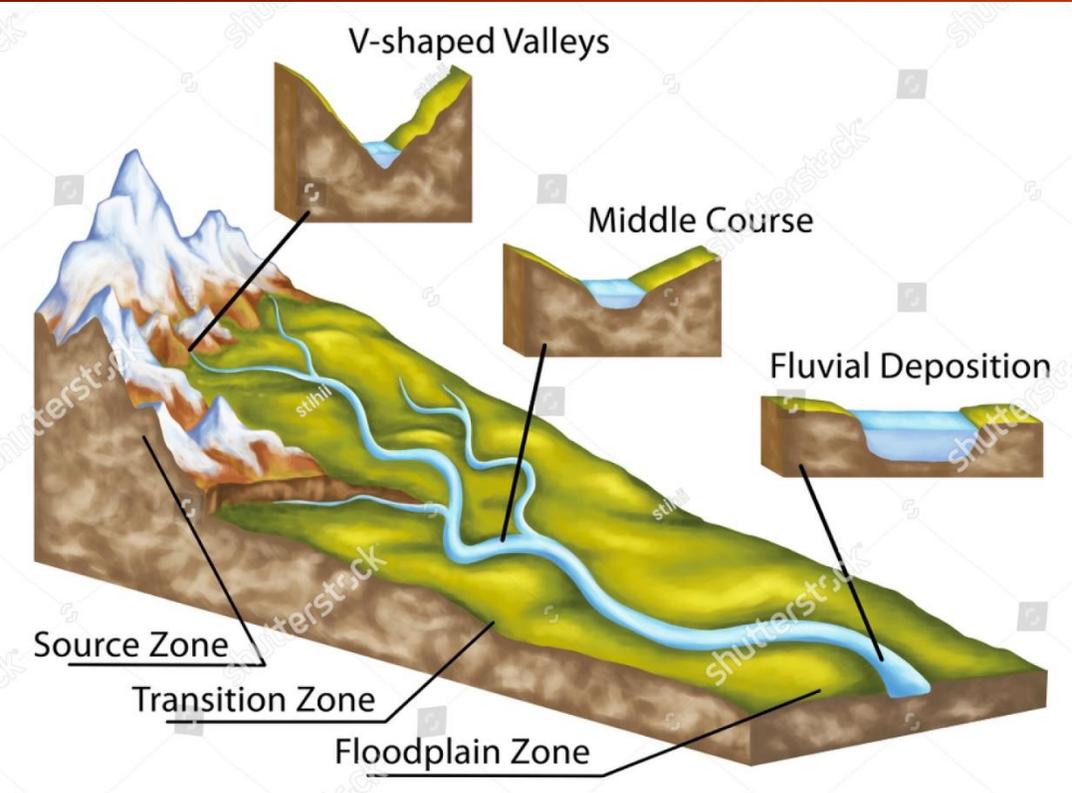
Transition Zone

Floodplain Zone



- ▶ The gradient is usually very steep.
- ▶ The river flows through interlocking spurs.
- ▶ It is associated with waterfalls and rapids.
- ▶ It has few or no tributaries.
- ▶ Potholes are common.
- ▶ Vertical erosion is dominant.
- ▶ The river is associated by deep narrow steep slopes which give it a v-shape (v-shaped valley)

Middle course/mature stage/valley stage.



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- ▶ The river at this stage has the following characteristics.
 - ▶ Bluffs.
 - ▶ Flood plains.
 - ▶ Gentle gradient.
 - ▶ Wider valley floor.
 - ▶ River meanders begin to develop.
 - ▶ Interlocking spurs are cut to truncated spurs.
 - ▶ The river at this stage has a number of tributaries.
 - ▶ Lateral erosion is more dominant at this stage.
 - ▶ River cliffs and slip off slopes are created.

Lower / plain / old / senile course.

At this stage, the river has a large volume of water and a heavy load. The river at this point is mainly concerned with deposition and has the following characteristics.



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- ▶ A very gentle gradient.
 - ▶ Pronounced meanders.
 - ▶ Formation of ox-bow lakes.
 - ▶ Development of flood plains, braided channels and deltas.
 - ▶ Lateral erosion is very pronounced.
 - ▶ Distributaries.
 - ▶ Deltas.

▶ Flood plains.



► Levees

An embankment built by deposited material that rises above the flood plain.



► Delta

Large, flat
low-lying
plain of
river
deposits.



► Estuary

Broad tidal channel at the mouth of a river where it enters the sea.



A SKETCH MAP OF AFRICA SHOWING MAJOR RIVERS.

