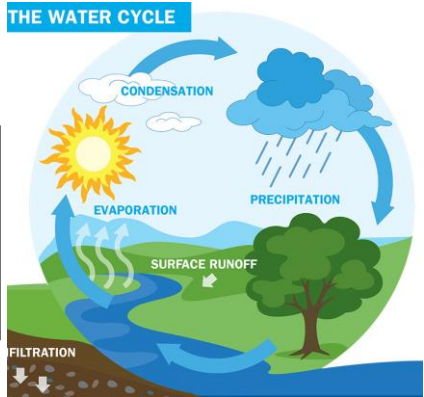


Year 6 - Rivers Knowledge Organiser

Keywords

source	evaporation	channel	suspension	drought
mouth	precipitation	cross-section	<u>bedload</u>	desalination
tributary	surface runoff	estuary	<u>sediment</u>	flood
confluence	infiltration	erosion	V-shaped valley	flood defences
river basin	throughflow	solution	waterfall	flash flood
watershed	groundwater	abrasion	gorge	saturated
floodplain	water table	hydraulic action	plunge pool	embankment
river bed	impermeable	attrition	meander	abstract
river bank	long profile	transport	oxbow lake	aquifer

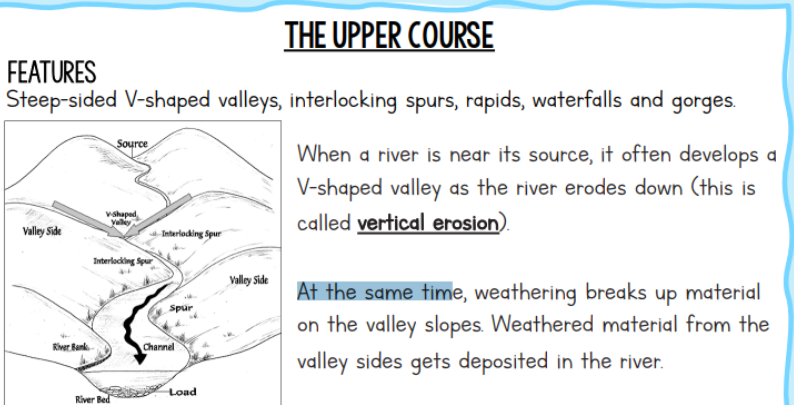
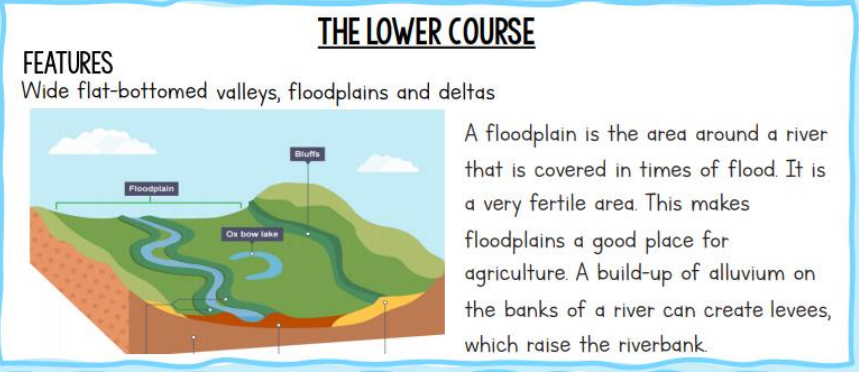
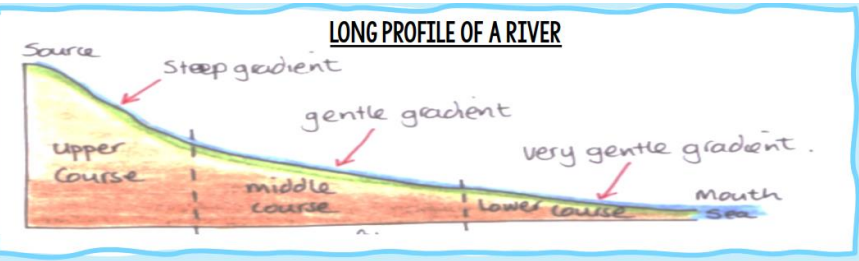


River Processes

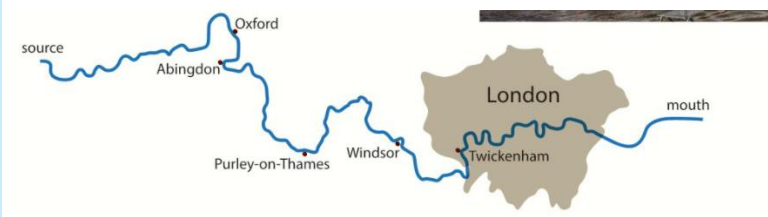
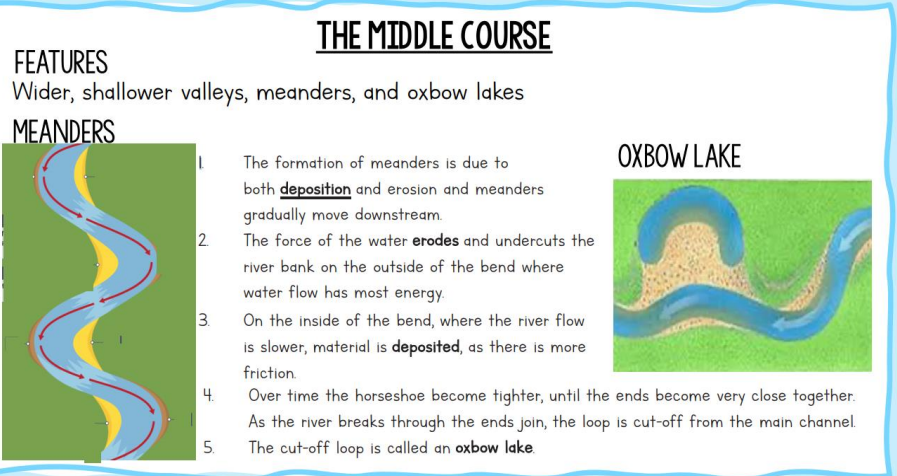
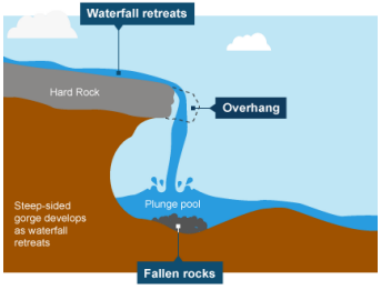
- Erosion** – Rocks are worn away.
- Transportation** – eroded material is carried downstream by the river.
- Deposition** – The river loses energy and transported material is dropped.

Flooding

- Causes of flooding:**
- Heavy rain – the main cause, filling the rivers with water
 - Snow melting – Spring snow melting in mountains
 - Steep land – makes the water run down to rivers faster
 - Impermeable rock – water won't soak in
 - Tributaries – water gets to the river quickly.
 - Built up areas (urbanisation)
 - Deforestation (cutting down trees) – trees aren't there to absorb water.



1. The soft rock erodes more quickly, **undercutting** the hard rock
2. The hard rock is left **overhanging** and eventually collapses.
3. The fallen rocks crash into the **plunge pool**. They swirl around, causing more erosion
4. Over time, this process is **repeated** and the waterfall moves upstream
5. A steep-sided **gorge** is formed as the waterfall retreats



Flooding has happened in all of these places along the River Thames in the last 20 years.

- Flood prevention:**
- Short-term**
- Portable flood barriers
 - Sandbags
 - Flood shutters (used at St John's!)
- Long-term**
- Embankments – creates more space for water in the river.
 - New river channels – creates more space for water
 - Planning new housing carefully – don't build on a floodplain
 - Allowing areas to flood – e.g. low value farmland

The Thames Barrier was created to protect the city of London from flooding. [Read more here - https://www.bbc.co.uk/news/magazine-26133660](https://www.bbc.co.uk/news/magazine-26133660)