Trull School: Rowan: Year 4 Geography & Science Knowledge Web – Rivers and the Water Cycle

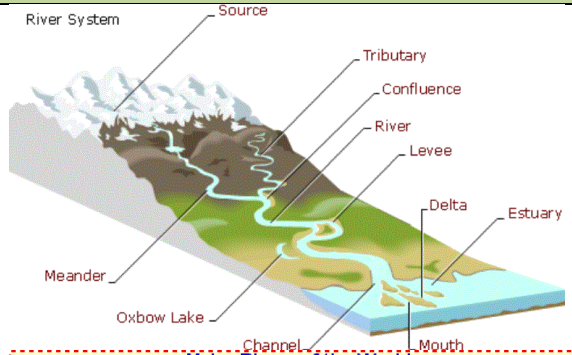
What should I know already?

- There are different water features found on the Earth such as lakes, oceans, seas and rivers.
- There are rivers in our local area.

Key vocabulary

river	A flowing, moving stream of water
stream	A small, fast flow of water
canal	Waterways built by people used for transport
reservoir	The store of water that is held back by a dam.
lake	Large bodies of water, surrounded by land and not part of an ocean.
sea	Huge body of salt water
source	Where the river begins its journey
channel	The path of the river
tributary	A small river or stream that meets a large river
mouth	Where the river enters the sea
river bed	The bottom of a river
meander	A winding bend in the river
estuary	The last section of the river before the sea
delta	Where the river splits & spreads out into several branches before entering the sea

Diagrams

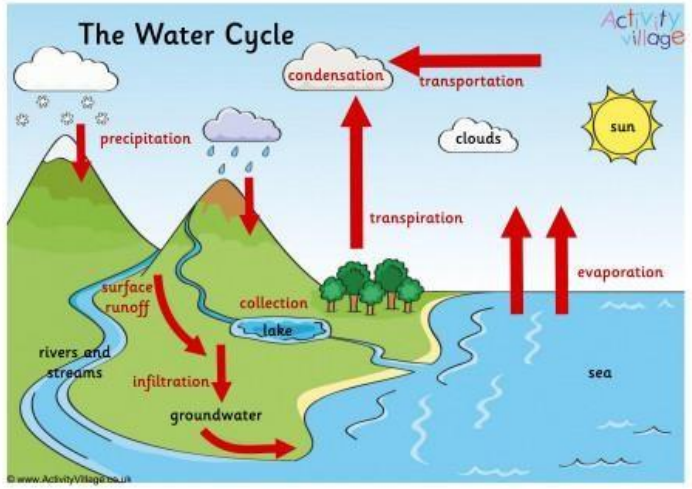


What will I know by the end of the unit?

Rivers

- rivers have sources, channels, tributaries and mouths.
- rivers receive water from a wide areas and flow eventually into a lake or the sea. The water flows naturally downwards, sometimes underground and eventually to the sea.
- the five main rivers of Europe: Volga, Danube, Rhine, Elbe, Loire.

Water Cycle



Evaporation	When heat from the sun warms the water, the liquid turns into a vapour (gas) and rises because it is lighter.
Condensation	The water vapour rises into the sky. As it goes higher the air gets colder and cools down the gas. This causes the particles to condense (come together) and form microscopic droplets of water.
Precipitation	As soon as the water droplets reach a certain size, their weight is too great to stay in the air and they fall down to the ground. This is called precipitation. If the air is very cold, the water falls as ice or sleet. Otherwise, it falls as rain.
Collection	Wherever the water lands, this is called the 'collection' stage of the water cycle. Rain and snow may return to the Earth as rivers or lakes, on the ground, or on houses and roads, where it soaks down towards the rivers. Eventually, most of this water flows into the seas. The water cycle can start again!

Science ***States of Matter***	**Matter makes up our planet and the whole universe.** On Earth, all matter exists in one of three different states: solid, liquid or gas. A **solid** can hold its shape (for example, water in solid form is ice). A **liquid** like water forms a pool: it flows or runs but it can't be stretched or squeezed. A **gas** can flow, expand and be squeezed; if it is in an unsealed container it escapes (water in gas form is steam). **Depending on its temperature, matter can change state**; heating, cooling, evaporating and condensation are ways in which a material changes state.	**Melting** is the process of changing a solid into a liquid. **Evaporation** is the process of changing a liquid into a gas. **Condensation** is the process of changing a gas into a liquid. **Freezing** is the process of changing a liquid into a solid.