



# How does water go round and round?

YEAR 4  
GEOGRAPHY

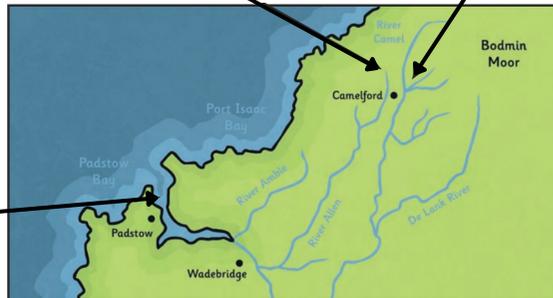
## KNOWLEDGE MAT

### KEY KNOWLEDGE

The source of most rivers is on high ground or in the mountains.

Some rivers join up with other rivers (**tributaries**). The point where they meet is called a confluence.

Rivers in England, at their **mouth**, will flow into either the: North Sea, Irish Sea, English Channel or Atlantic Ocean.



### KEY VOCABULARY

**channel** = The course in the ground that a river or water flows through.

**dam** = A barrier built to hold back water.

**deposition/ deposit** = When rocks and other materials that have been eroded are dropped off further along the river.

**discharge** = The amount of water flowing along a river per second.

**erosion** = Rocks and other river materials are picked up by the water and moved to another place along the river.

**mouth** = The point where a river joins the sea.

**source** = The place where a river begins.

**tidal bore** = A strong tide from the coast that pushes the river against the current causing waves along the river.

**tributaries** = Rivers that join up with another river.

**valley** = A long ditch in the earth's surface between ranges of hills or mountains.

## The course of a river

### The Upper Course

Rain falling on high ground collects in channels and flows downwards forming a stream. Streams run downhill and join other streams, increasing in size and speed, forming a river. The river here flows quickly and the channel has steep sides and runs through valleys. Features include - waterfalls and rapids.



### The Middle Course

Fast flowing water causes erosion making the river deeper and wider. Features include - meanders.

### The Lower Course

Rivers flow with less force due to being on flat land. The river deposits the eroded material that it has carried. Riverbanks have shallower sides. Features include - floodplains, deltas and estuaries.



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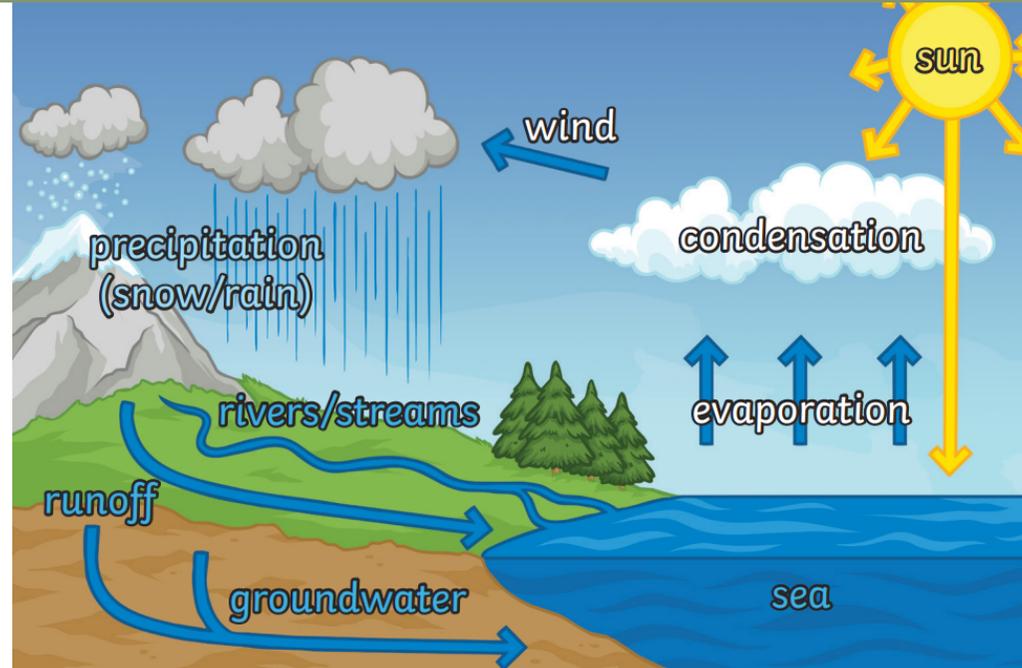
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## KEY KNOWLEDGE

### The Water Cycle

Clouds form when warm, moist air is cooled. When it is cooled, it condenses into tiny water droplets which appear as clouds.

Heat from the sun evaporates water into water vapour, which rises, condenses in the cool air and then falls back down to earth.



### Changing State

Evaporation occurs when a liquid changes into a gas or water vapour.

#### Evaporation



#### Condensation

Condensation is when a gas cools and changes to a liquid.



This is when a solid is heated and changes to a liquid.

#### Melting



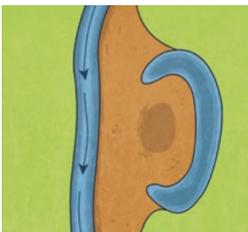
#### Freezing

Freezing is the process of a liquid cooling and changing to a solid.



### Meander - a curve in the river

Eroded materials are carried by the river and released, building up the land on the inside of the bend where the water flows more slowly.



### Oxbow lakes - a U-shaped lake

As meanders grow, two meanders can merge together through erosion. The water takes this newer, shorter course. The river deposits eroded materials which block off the old part of the river forming an oxbow lake.