



# How does the water go round and round?

## Knowing More, Remembering More

### Remembering previous learning:

What different types of weather do we have in the UK? Lightening, cloud, wind, sun, rain, snow.

How do we know what the weather will be like? People predict the weather and report what it will be like. They use maps and symbols to show what the weather will be like.

How is a river different from a desert? Deserts are waterless, rivers have flowing water. It is hard to live in deserts. Not much grows in deserts.

What are the 5 oceans? Pacific, Atlantic, Arctic, Indian, Southern

## Key Learning Steps:

1. Where does all the rain go?
2. Where does all the rainfall come from?
3. What can we learn about the River Thames?
4. How and where do people use and change rivers?
5. How do rivers wear away mountains?
6. Can we model a river or a stream?

## In this unit children will..

- name and locate some of the UK's and the world's most significant rivers and mountain environments
- learn about the features of a named river (the River Thames) in the UK, from source to mouth
- learn how rivers and mountains are formed
- identify some of the processes associated with rivers
- understand where rivers and mountains fit into the water cycle

## Key Vocabulary:

Alps	flow	meander
Three Gorges Dam	glacier	mountain
Andes	gradient	mouth
Antarctic	Great Dividing Range	North West/Scottish
Appalachians	grid reference	Highlands
Atlas	hill	OS (Ordnance
capital city	Himalayas	Survey) map
clouds	hydro-electric power	percolate
condensation	hydrological cycle	percolation
confluence	Source	ports/docks
crossing	industries	precipitation - rain
points/bridges	infiltrate/infiltration	Pyrenees
dam	infiltration	reservoir
deposit/deposition	irrigation	River
downstream	key	Rockies
Drakensburg	source	rural
droplets	stream	sacred river
erode/erosion	terrain	scree
estuary	Thames basin	sea
evaporate	Tianshan	snow and hail
evaporation	transpiration	Snowdonia
flood control		

## Key Geographers and Inspirational People:



Bernard Palissy



Klara Dan von Neumann



Vivian Giang



Christina Symons

## Knowing More, Remembering More

### Knowing more in Y4

Where does rainfall go when it falls to Earth? The water flows downhill, both over and through the ground, depending on the surface. Rainwater forms streams and rivers.

Where does rainfall come from? Water evaporates from oceans, seas, lakes and the ground.

How do clouds form? Evaporated water then condenses as clouds.

How and why does rain falls from clouds? When the droplets in the clouds combine and grow large enough, they become too heavy to stay suspended in the air. Gravity pulls them down to the Earth's surface as precipitation, which can take the form of rain, snow, sleet, or hail depending on the temperature and atmospheric conditions.

Where is the source of the River Thames? Thames Head (Gloucestershire).

Where is the mouth of the River Thames? The Thames Estuary.

How do people use rivers? Transport of people and/or goods, irrigation, water supply, religious ceremonies, tourism.

How do people change rivers? Flood control, dams, reservoirs, hydroelectric power.

What are the names of some of the world's major rivers? Yangtze, Mississippi Nile, River Niger, Rhine, Danube.

What are the names of some of the world's main mountain ranges? Himalayas, Andes, Atlas, Rockies, Pyrenees, Alps, Great Dividing Range, Urals,

Appalachians, North West/Scottish Highlands, Tianshan, Snowdonia, Drakensburg, Antarctic Mountains

How has water helped to make these mountain ranges the shapes they are today? Glaciers (frozen rivers) carved U shaped valleys between mountains. Rivers carve V shaped valleys in mountains.

What is erosion? Erosion is where water wears away rocks and soils.

What is transportation? The movement of eroded materials from one place to another by water or wind.

What is deposition? Deposition is the process where the materials being transported by natural forces are eventually dropped or settled in a new location.