

Enquiry Knowledge Organiser Year 4



Famous scientists

Antoine Lavoisier and Joseph Priestley

Where does our water come from?

These two scientists were mainly responsible for the discovery of oxygen.



Antoine Lavoisier and Joseph Priestley

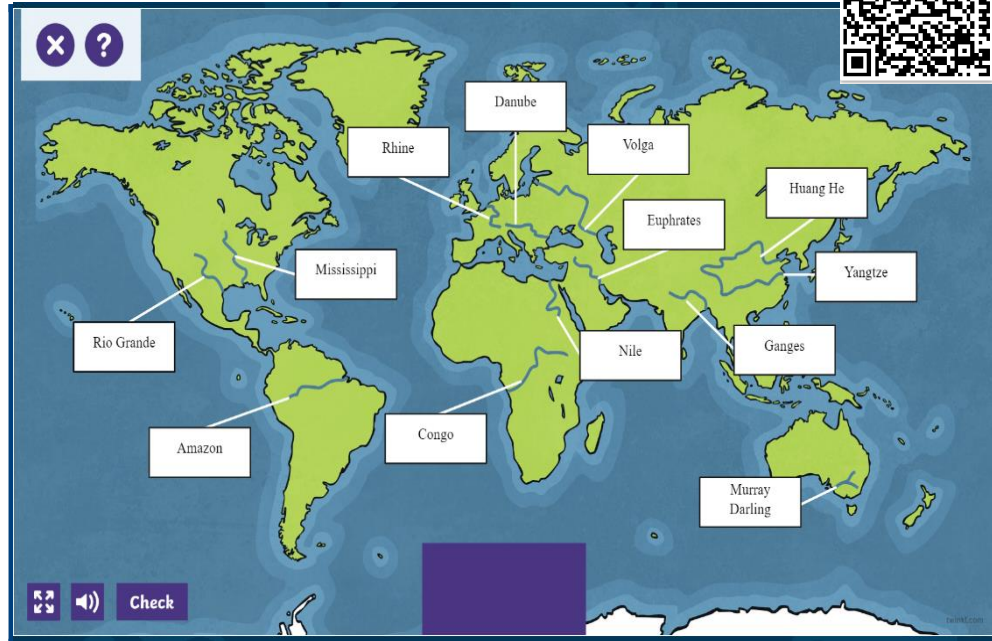
William Thomson

Where does our water come from?

William Thomson, who is better known as Lord Kelvin, determined the temperature of absolute zero (the coldest possible temperature)



Lord Kelvin



Talk like an artist

landscape - the depiction of natural scenery such as mountains, valleys, trees, rivers, and forests.

Canaletto - An Italian painter from 1697 who often painted rivers.

Hockney - A British pop artist born in 1937 who often painted water.

Brush stroke - a mark made by a paintbrush drawn across a surface.

Sentence stems

- In my opinion...
- I know that...because I have observed...
- I believe there is a pattern of...
- I think this has developed by...



Key question

- How does this technique make you feel?



Did you know?

Rivers carry water and nutrients to areas all around the Earth. They play a very important part in the water cycle, acting as drainage channels for surface water. Rivers drain nearly 75% of the Earth's land surface. Rivers provide excellent transport links for towns and cities.

Major Rivers in UK



Thames
London river that is 184 miles long

Severn
Britain's longest river (220 miles) from Wales to Bristol.

Mersey
Liverpool river that is 70 miles long

Major Rivers in the world


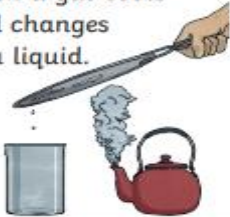


Amazon	Situated in Brazil, it is 4000 miles long. Runs through the Amazon rainforest.
Nile	The world's longest river (4,160 miles long) and runs into the Mediterranean.



Overview Y4 Where does our water come from?

What knowledge do I already have?

Changing State

Evaporation	Condensation	Melting	Freezing
Evaporation occurs when a liquid changes into a gas or water vapour .	Condensation is when a gas cools and changes to a liquid.	This is when a solid is heated and changes to a liquid.	Freezing is the process of a liquid cooling and changing to a solid.
			

- I can tell you about sources of water, such as the sea, lake, rivers, ponds, water fountains and taps.
- I can tell you about areas in the world such as the Equator, Northern Hemisphere and Southern Hemisphere.
- I can explain about the Tropics of cancer, and Capricorn.
- I can talk about key features in the Arctic and Antarctic circles.
- I can describe how water is transported in plants.
- I can talk about the importance of the lines of latitude and earth.

The Solar System

Talk and write like a Scientist

water cycle - the continuous movement of water on, above and below the surface of the Earth.

evaporation - the process of turning from liquid into a gas.

condensation - the process of turning from a gas into a liquid.

freezing - the process of turning from a liquid to a solid.

melting - the process of turning from a solid to a liquid.

water vapour - the gaseous phase of water.

precipitation - rain, snow, sleet or hail that falls to or condenses on the ground.

temperature - how hot or cold something is.

solid - a substance or object that is firm and stable in shape.

liquid - a substance that flows freely but is of constant volume like water or oil.

gas - a substance or matter in a state in which it will expand freely to fill the whole of a container.

particles - a particle is an extremely tiny piece of matter; scientists believe that everything in the universe is made up of particles.

Sentence stems

- I observed...
- I predicted...
- I think this..because...
- I know this, so I think...
- This will happen because...

Key question

- What do you think?
- What will happen if..?



Talk and write like a Geographer

The River Avon - A river in the southwest of England.

runoff - the flow of water across the earth.

meander - curves in the channel of a river.

source - the place where a river begins.

mouth - where a river flows into a larger body of water like a lake.

bank - the land alongside a river.

groundwater - water held underground in soil or rocks.

waterfall - a cascade of water falling from a height, formed when a river or stream flows over a precipice or steep incline.

Sentence stems

- I know that because I have observed.
- I believe there is a pattern of..
- A sustainable/economical solution would be..
- Environmentally, the project is a good/bad idea because..

Key question

- How has this influenced our world?



The Water Cycle

