

Brentside Knowledge Organiser - Science

Year: 4

Topic: Science (States of Matter/
Water)

National curriculum: States of
Matter.

What I should already know:

This will be the pupils first opportunity to explore the Water Cycle.
In year 2 pupils learned that the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

What I should know at the end of the topic:

	Understand the word cycle
	Children will feel confident exploring and discussing the processes involved in the water cycle.
	Children will confidently use key terms including evaporation and condensation.
	Pupils will understand states of matter and confidently discuss solids, liquids and gasses.
	Children will understand the processes involved in changing states of matter
	Children will confidently discuss issues surrounding water pollution.

Timeline:

Week 1– What is the Water Cycle (introduction)

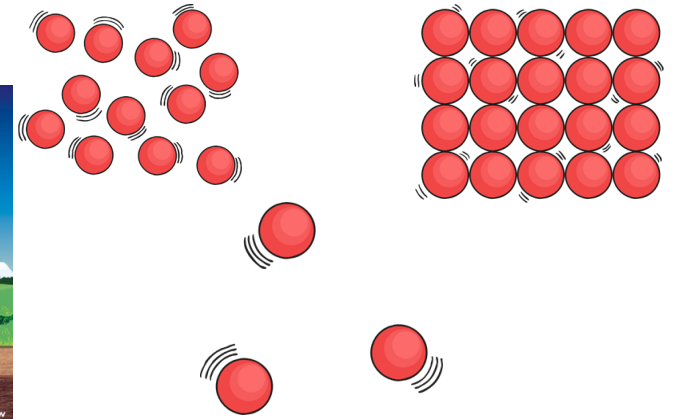
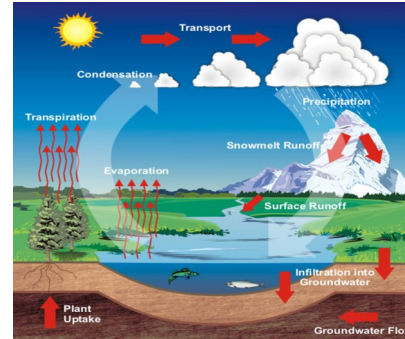
Week 2– Water cycle (In-depth exploration)

Week 3 – Water Pollution and its effects

Week 4- States of matter

Week 5– Changing states of matter.

Maps/Diagrams/Artefacts



Vocabulary

The water cycle	The water cycle is the process by which water moves from the sea to the air and then to the land
Transpiration	. When the sun heats up water from the sea and it goes into the air.
Condensation	. When water vapour cools and turns into clouds
Evaporation	When the sun heats up water
Precipitation	. Rain, hail, sleet and snow that falls from the clouds
Solid	Solids are rigid, they have a definite shape
Liquid	Liquids are fluid, they change their shape to match the container they are in
Gas	The molecules in gas fill the container they are in
Particles	a relatively small discrete portion or amount of something
Molecules	a group of atoms bonded together,
Pollution	Water pollution is the contamination of water bodies, usually as a result of human activities
Water Vapour	water vapour vapour is the gaseous phase of water
Melting	Melting happens when a solid turns into a liquid from being heated