Year 4: States of Matter and The Water Cycle Knowledge Mat (Chemistry)
What is the matter?

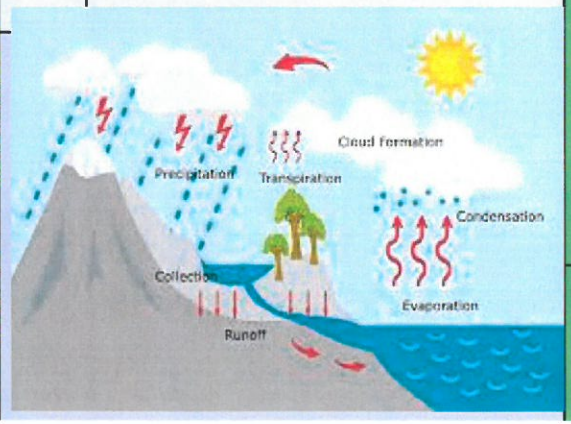
Subject Specific Vocabulary

water vapour	Water that is in the form of gas.
condensation	When water vapour that is around us changes from a gas back to water.
precipitation	Any watery substance such as rain, water, snow, hail or sleet that falls to Earth.
evaporation	When liquid changes into gas, usually when it heats up.
substance	Any solid, liquid, powder or gas is a substance.
matter	Any solid, liquid or gas that exists in the universe.
lava	Very hot liquid that comes out of a volcano.
solid	A substance that stays the same shape. It particles do not move In the solid state, the material holds its shape. Solids have vibrating particles which are closely packed in and form a regular pattern. This explains the fixed shape of a solid and why it can't poured. Solids always take up the same amount of space.
gas	Gaseous matter is made up of matter that is so loose that it is always moving. In the gas state, particles can escape from open containers. Gases have particles which are spread out and move in all

Interesting Facts

Know the Stages of the water cycle and the parts played by evaporation and condensation.

1	The sun heats up rivers, lakes and the sea
2	Water evaporates into the air. This is called water vapour.
3	The water vapour rises, cools (condenses) and turns back to water in the form of clouds.
4	The droplets in the clouds become too heavy and fall as rain, snow or hail.
5	The rain, snow or hail is then collected in rivers that run off to the sea.
6	The cycle starts again.



Sticky Knowledge States of Matter

Know the states of matter (solids, liquids and gas)

Compare and group materials based on their state of matter

Know the temperature at which materials change state (0 degrees and 100 degrees)

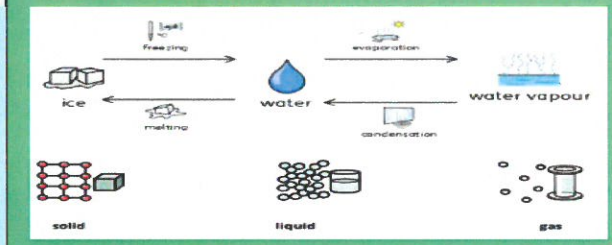
Know about and explore how some materials can change state when they are heated and cooled.

Interesting Facts

Water can exist in three forms: liquid (water), solid (ice) or gas (water vapour).

Water can be used to create electricity through a hydro-electric power station.

About 70% Earth is covered in water.



97% of water is in the oceans (this is salty water) and 2% is in the ice caps, leaving only 1% available for us to