Science – States of Matter

This half term, children will be learning about states of matter and the water cycle. A state of matter is the form in which a material can exist. The three states of matter we encounter in everyday life are solids, liquids and gases. The water cycle is the process of water moving between the earth's oceans, atmosphere and land.

Key facts	Key Vocabulary	
There are three states of matter: solid, liquid and gas.	Cooling	Make or become cool or cold.
In a solid, the particles are close together in ordered rows. They move a little bit on the spot.	Collection	When water falls back into oceans, lakes, rivers or on the ground.
In a liquid, the particles are quite close together, but can move around each other easily. They move quite a bit, moving gently past each other.	Condensation	When a vapour or gas becomes a liquid.
	Evaporation	Turning from liquid into vapour.
In a gas, the particles can move around very quickly in all directions. There is a lot of space between each particle.	Freezing	When a material changes from a liquid to a solid.
	Freezing point	The temperature at which a liquid turns into a solid when cooled.
	Gas	Materials that escape from an unsealed container.
Water can be a solid (ice), a liquid and a gas (water vapour).	Heating	Make or become hot or warm.
	Liquid	A material that forms a pool not a pile.
Solids hold their shape; liquids form a pool not a pile; gases escape from an unsealed container.	Melting Melting point	Make or become liquefied by heating. The temperature at which a solid will melt.
	Particles	A minute portion of matter.
	Solid	Materials that hold their shape.
When a solid turns into a liquid it is called melting. The temperature at which a solid material melts is called its melting point.	States of matter	The structure and state of a material.
	Temperature	The degree of heat present in a substance or object.
When a liquid turns into a solid it is called freezing. The temperature at which a liquid material freezes is called its freezing point.	Thermometer	An instrument for measuring and indicating temperature
	Precipitation	Droplets of water fall from clouds in the form of rain, sleet, hail or snow.

The four stages of the water cycle are evaporation, condensation, precipitation and collection.

Water cycle

The process of water moving between the earth's oceans, atmosphere and land.

