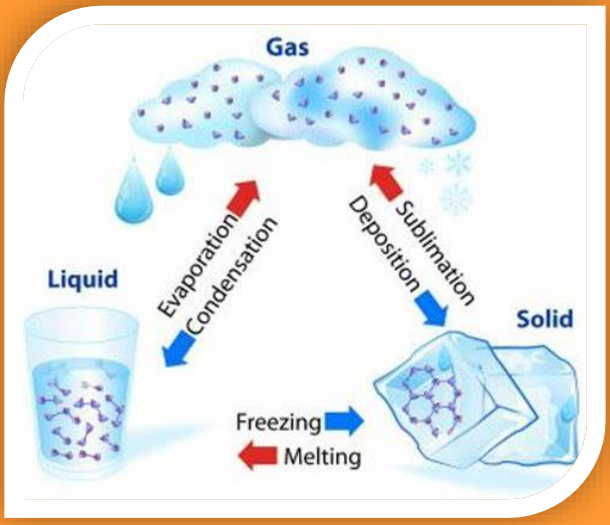
Water O' Water
States of Matter

YEAR 4



LINKS IN THE CURRICULUM:

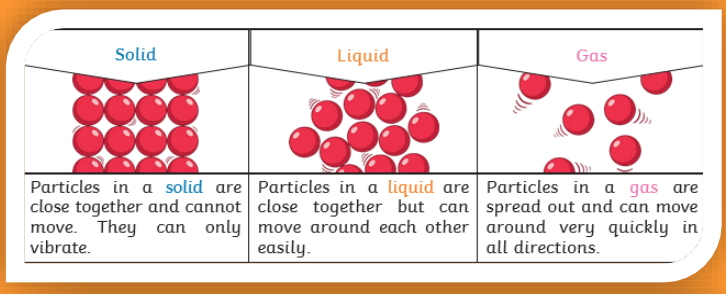
EYFS - Water exploration

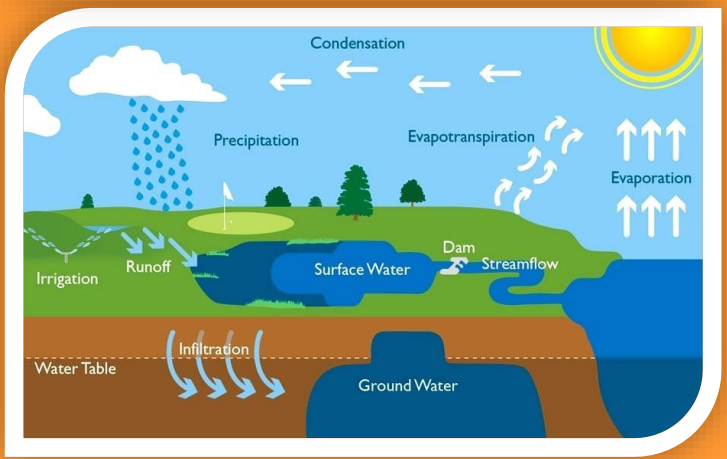
Year 5 – Changes in state when separating solutions

KEY VOCABULARY	
States of Matter	Materials can be one of three states. Solid, Liquid or gas. Some liquids can change state,
Solids	These are materials that keep their shape unless a force is applied to them. Solids take up the same amount of space no matter what has happened to them.
Liquids	Liquids take the shape of their container. They can change shape but do not change the amount of space they take up. They can flow or be poured.
Gas	Gases can spread out to completely fill the container or room they are in. They do not have any fixed shape.
Water vapour	This is water that takes the form of a gas. When water is boiled, it evaporates into a water vapour.
Melt	This is when a solid changes to a liquid.
Freeze	Liquid turns to a solid during the freezing process.
Evaporate	Turn a liquid into a gas.
Condense	Turn a gas into a liquid.
Precipitation	Liquid or solid particles that fall from a cloud as rain, sleet, hail or snow.
Particles	The tiny pieces that make up everything.
The Water Cycle	The continuous movement of water on earth in different forms.

Key Knowledge

- Some materials change state when they are heated or cooled.
- Evaporation and condensation are changes of state caused by temperature, These are key parts of the water cycle.
- Solids, liquids and gases can be identified by their observable properties.
- Solids have a fixed size and shape.
- Liquids can pour and take the shape of the container in which they are put.
- Liquids form a pool not a pile.
- Solids in the form of powders can pour as if they were liquids but make a pile not a pool.
- Gases fill the container in which they are put.
- Gases escape from an unsealed container.
- Gases can be made smaller by squeezing/pressure.
- Liquids and gases can flow.





Working Scientifically

- Make a visual representation or **model** of the water cycle.
- **Record ideas** and develop simple descriptions of **observations.**
- **Investigate** the effect temperature has on changing states.