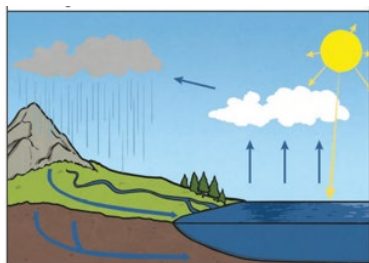


Potions and Spells – Knowledge Organiser

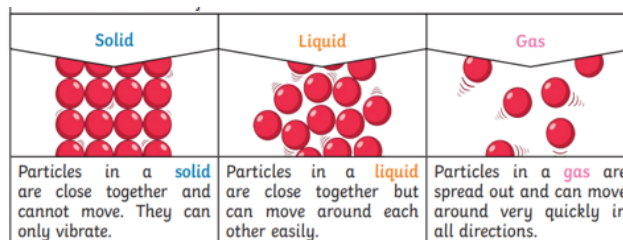
Knows:

1. Identify whether a material is a solid, a liquid or a gas.
2. Know how particles are arranged in solids, liquids and gases.
3. Know that materials can change state when heated or cooled.
4. Know that water changes state at about 0°C and 100°C.
5. Know that evaporation is different from boiling.
6. Know evaporation is more rapid at higher temperatures.
7. Know that water evaporates, then condenses to fall as rain.
8. Draw a diagram of the water cycle.

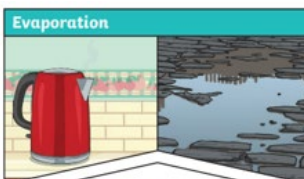
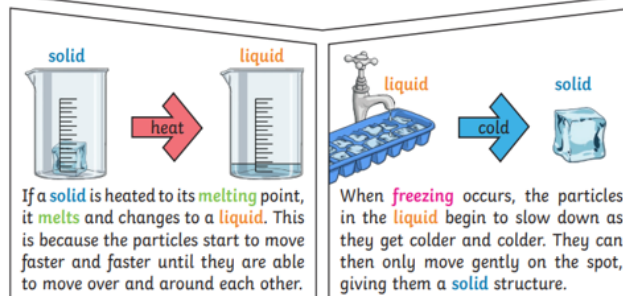


1. Water from lakes, puddles, rivers and seas is **evaporated** by the sun's heat, turning it into **water vapour**.
2. This **water vapour** rises, then cools down to form water droplets in clouds (**condensation**).
3. When the droplets get too heavy, they fall back to the earth as rain, sleet, hail or snow (**precipitation**).

The Three States of Matter



When water and other **liquids** reach a certain temperature, they change state into a **solid** or a **gas**. The temperatures that these changes happen at are called the **boiling**, **melting** or **freezing** point.



Evaporation occurs when water turns into **water vapour**. This happens very quickly when the water is hot, like in a kettle, but it can also happen slowly, like a puddle **evaporating** in the warm air.



Condensation is when **water vapour** is cooled down and turns into water. You can see this when droplets of water form on a window. The **water vapour** in the air cools when it touches the cold surface.

Vocabulary	Definition
States of matter	Materials can be one of three states: solids, liquids or gases. Some materials can change from one state to another and back again.
Solids	These are materials that keep their shape unless a force is applied to them. They can be hard, soft or even squashy. Solids take up the same amount of space no matter what happens 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.
Gases	People living in Britain and some parts of Europe after the Iron Age.
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

