CBS Knowledge Organiser

Year: 4

Topic: Science : States of Matter

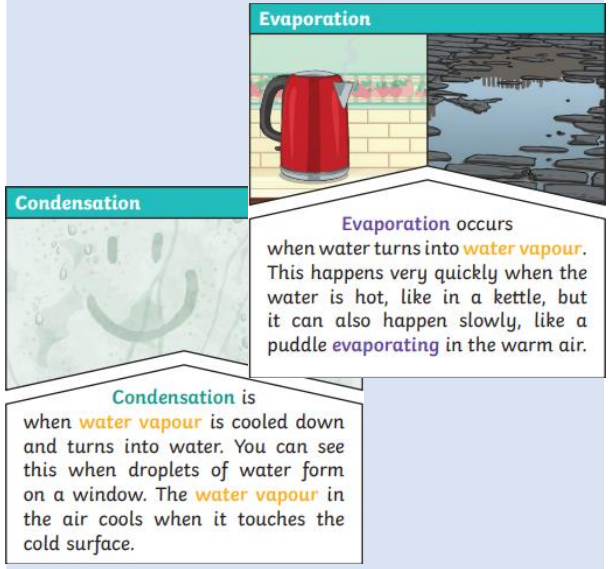
What I already know:

- Year 2 – Climate – Melting point.
- Year 2 – Materials – Material properties
- Year 1 – Weather - Rain

New Knowledge/Facts

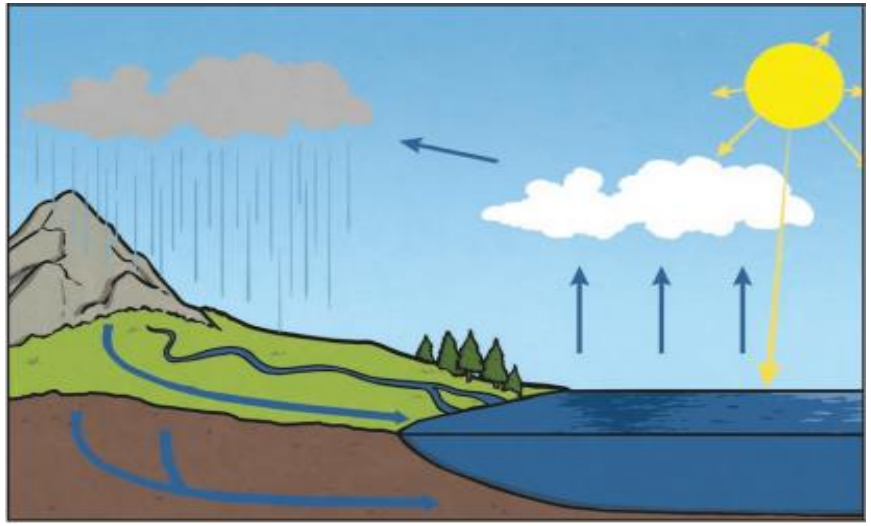
The Water Cycle.

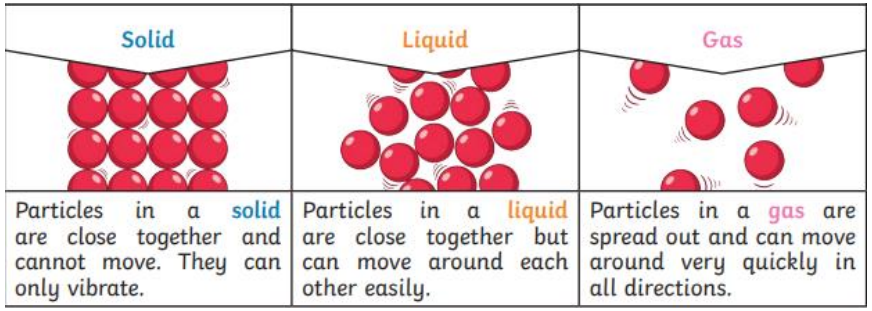
1. **Water from lakes, puddles, rivers and seas is evaporated by the sun's heat, turning it into water vapour.**
2. **This water vapour rises, then cools down to form water droplets in clouds (condensation).**
3. **When the droplets get too heavy, they fall back to the earth as rain, sleet, hail or snow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



Overview of unit

The children will explore the differences between solids, liquids and gases, classifying objects and identifying their properties. They will explore in-depth how water changes state, exploring melting, freezing, condensing as well as a particular focus on evaporation. Finally, they will learn about the stages of the water cycle, creating mini water worlds and an interactive water wheel to represent the different stages.





Key Vocab

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 force is applied to them. They can be hard, soft or even squishy. 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.
Gases	Gases can be spread out to completely fill the container or room they are in. They do not have any fixed shape, but they do have a mass.
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 into 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.
Transpiration	Water from plants and animals.
Infiltration	When water is absorbed and passed through the ground.