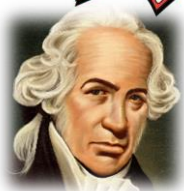


Science Knowledge Organiser

This is chemistry.
Chemistry is the
study of
properties of
matter.

States of Matter

Scientists



Daniel Fahrenheit



Anders Celsius

Key Vocabulary

- solid
- liquid
- gas
- state
- melting
- melting point
- boiling
- boiling point
- evaporation
- condensation
- water cycle
- temperature

Prior Knowledge

I know the difference between an object and the material from which it is made.


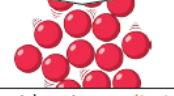
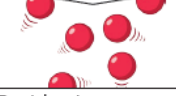
I can identify and name a variety of everyday materials and compare their suitability for particular uses.

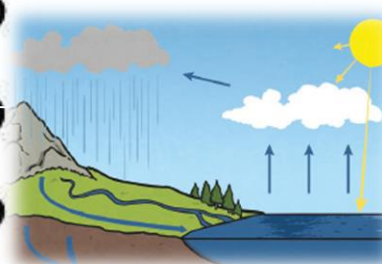
I can describe, compare and group materials according to their physical properties.

I know how the shape of solid objects can be changed.

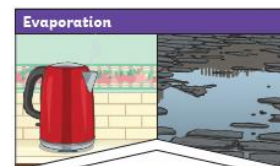
Key Knowledge

Matter is the stuff that makes up our planet and the whole universe. All matter exists in three states; solids, liquids and gases. Matter can change state depending on its temperature.

Solid	Liquid	Gas
		
Particles in a solid are close together and cannot move. They can only vibrate.	Particles in a liquid are close together but can move around each other easily.	Particles in a gas are spread out and can move around very quickly in all directions.



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).



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.