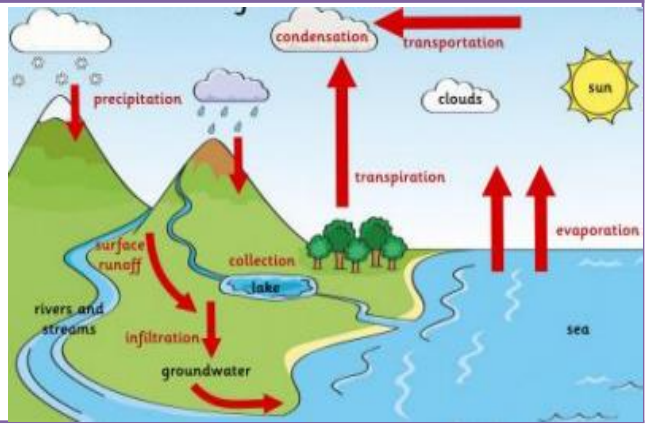
NEWARK HILL ACADEMY

In Summer Term 1, Year 4 are learning about

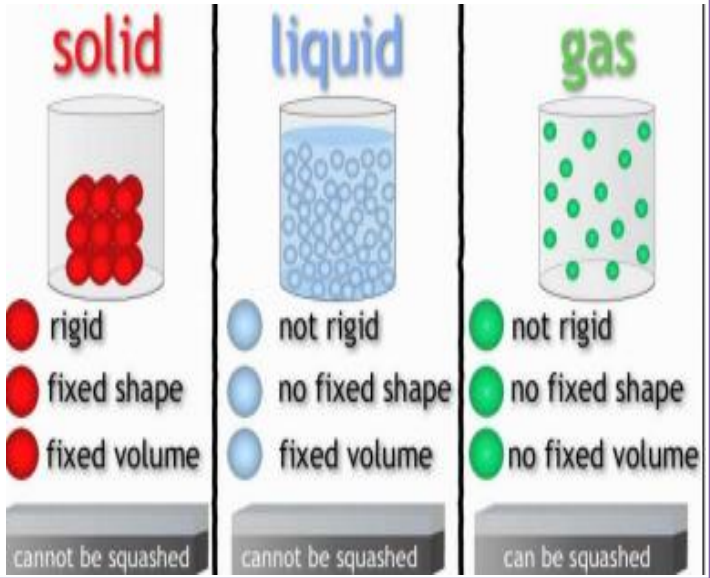
The Water Cycle

What is the water cycle?

The water cycle is the journey water takes as it moves from the land to the sky and back again. It follows a Cycle of evaporation, condensation, precipitation and collection/run off.



States of Matter



Changing State

- Some materials change state when they are heated or cooled and some of these changes can be reversed.
- Everyday examples of evaporation: washing drying, water boiling, puddles evaporating on a hot day.
- Everyday examples of condensation: water droplets forming inside windows or on a cold glass.

Anglian Water

- 4.3 million people get their high-quality drinking water from Anglian Water and over 6 million have their waste water collected by them.
- They try to minimize the amount of water being wasted, which is reinforced by their 'love every drop' motto.
- Anglian Water pride themselves at being the best water company for tackling leaks in the UK.
- They have 1,128 water recycling centres to treat water, as over 927 litres of water is used every day!

love every drop
anglianwater

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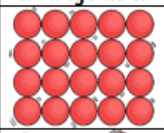
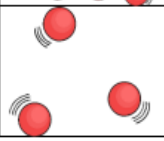
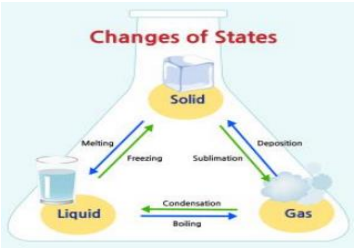
Particles

State	Particle arrangement	Particle properties
Solid		Particles are closely packed in a regular pattern. They vibrate on the spot.
Liquid		Particles are close but random. They can move over each other.
Gas		Particles are spread out and can move rapidly in all directions.

Reversible or not?

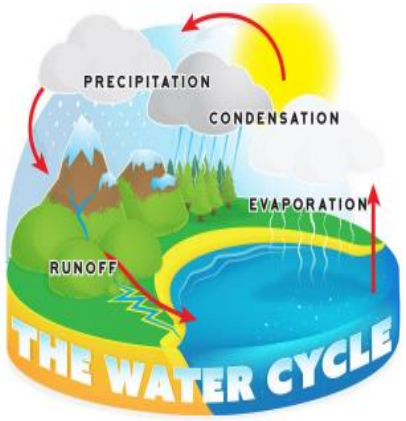
- Some things are capable of being reversible, which means that they can be reversed, so that a different state can be restored.
- However, some states are irreversible, which means that a chemical reaction has occurred, so something can't be undone or altered.



Vocabulary

matter	any solid, liquid or gas that exists in the universe.
solid	substance that stays the same shape, whether it's in a container or not.
liquid	a substance that can flow and take the shape of another container.
gas	substance that has no fixed shape, like oxygen.
temperature	how hot or cold something is, normally measured in degree Celsius (°C).
evaporation	the process of liquid heating and changing into gas.
condensation	the process of gas cooling and changing into a liquid.
water cycle	the process of water being recycled over and over again.
particle	an extremely small unit of matter.
water vapour	water in the form of gas.
boiling point	The temperature water begins to boil (100°C).

The Water Cycle



1. Energy from the sun heats up water in our rivers, lakes and oceans.
2. Water evaporates into the air, turning into vapour.
3. Water vapour rises up to the sky and cools, turning into a liquid, which creates clouds (condensation).
4. Eventually, the water droplets in the clouds become too heavy and fall down to earth as rain, snow, hail or sleet (precipitation).
5. Fallen water is then collected in rivers from the sea and the cycle begins again.