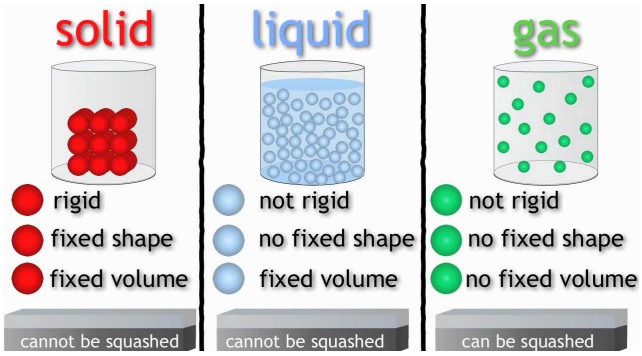
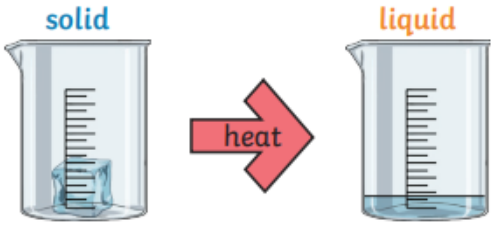
Year 4:

States of matter

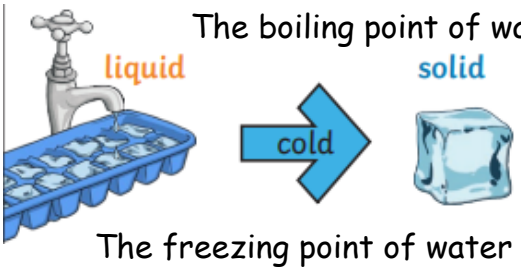
Key Learning

Matter can change from one state to another if it is heated or cooled. If water is frozen it causes ice to form (a solid) if heated it changes to water (a liquid). This change is called melting. If water is heated, it changes to steam (a gas).



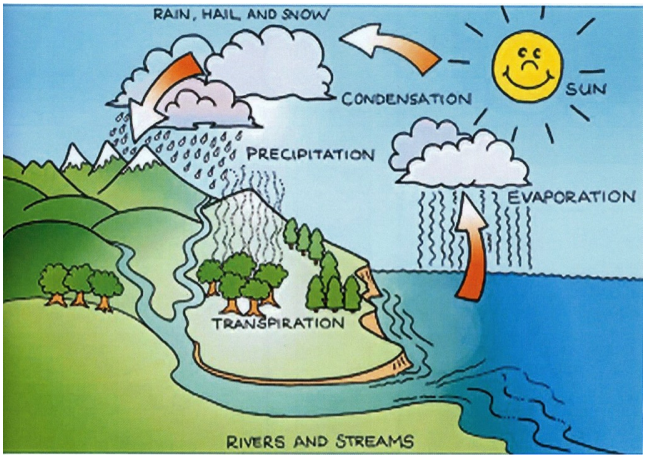


The boiling point of water is 100°C.



The freezing point of water is 0°C.

The water cycle is the complete journey that water makes, from one place to the other, and from one state to the other. As the word 'cycle' suggests, there is no starting point. This means that we can begin at any point and follow its path until it gets to where we started again.



Sticky Vocabulary

States of matter	Materials can be one of three states: solid, liquid or gas. Some materials can change from one state to another and back again.
Solids	Materials that keep their shape unless a force is applied to it. They can be hard, soft or even squashy.
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 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.
melt	When a solid changes to a liquid.
freeze	When a liquid changes to a solid during the freezing process.
melting point	The temperature at which a solid turns into a liquid.
Boiling point	The temperature at which a liquid turns into a gas.
Evaporation	When a liquid turns into a gas.
temperature	When a gas turns into a liquid.
water cycle	The journey water takes as it moves from the land to the sky and back again.