

YEAR 4 STATES OF MATTER

Key Vocabulary

| | |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| states of matter | Three states: solids, liquids or gases. Some materials can change from one state to another and back again |
| solid | Solids are materials that keep their shape. They can be hard, soft or even squashy. Solids take up the same amount of space no matter what has happened to them. |
| liquid | 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. |
| gas | 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. |
| particle | A particle is a small piece of matter that cannot be seen with the naked eye. |
| melt | When a material melts, it changes from a solid into a liquid. |
| freeze | When a material freezes, it changes from a liquid into a solid. |
| condense | When a material condenses, it changes from a gas into a liquid. |
| evaporate | When a material evaporates, it changes from a liquid into a gas. |
| temperature | Temperature is a measurement of how hot or cold something or somewhere is. |
| thermometer | a thermometer is a piece of scientific equipment used for measuring temperature. It measures in °C or °F. |
| water vapour | Water vapour is water in gas state |
| precipitation | Precipitation is water that falls back to land from the atmosphere as rain, sleet, snow or hail. |

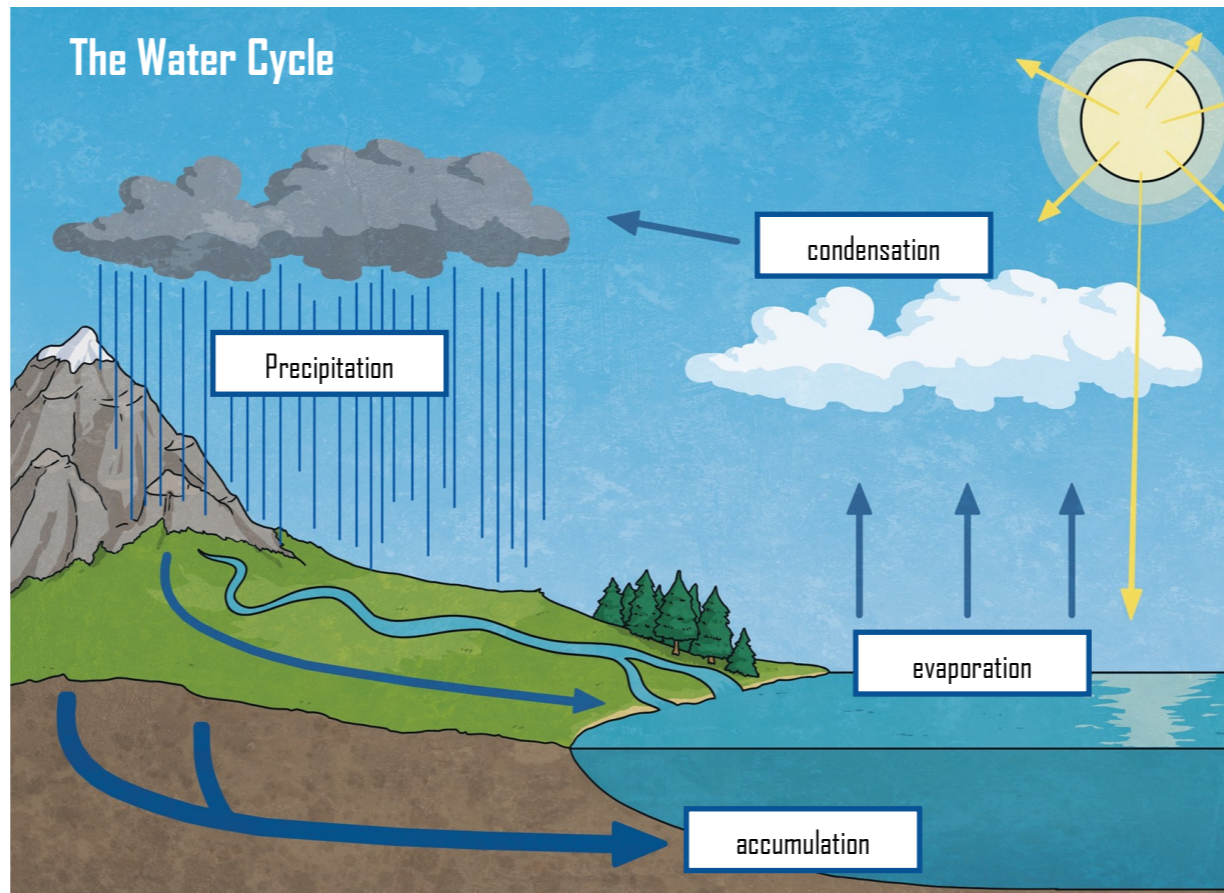
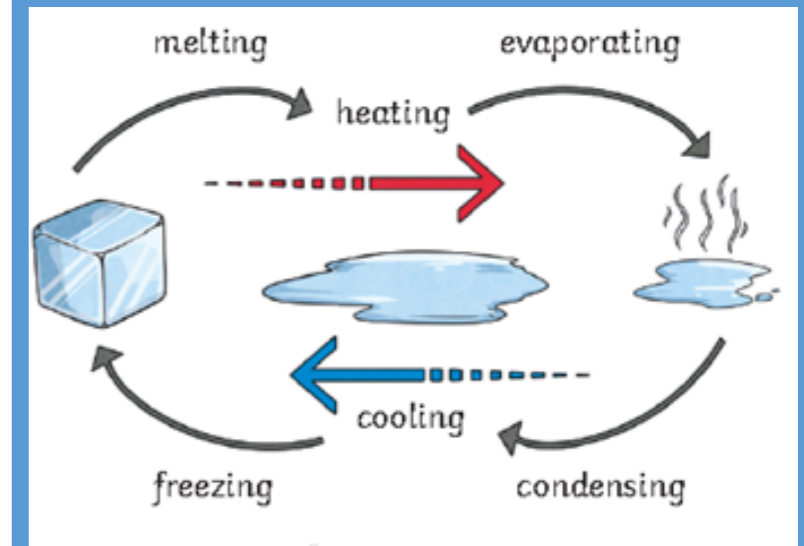
States of Matter

| Solids | Liquids | Gases |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| | | |
| The particles are close together in clear formations. The particles vibrate on the spot. | The particles are quite close together but move around each other much more easily. | The particles move quickly in all directions, filling the space. There is much more space between the particles . |
| solid | liquid | gas |

Changing State

Increasing the temperature of a solid can cause it to melt into a liquid and eventually evaporate the liquid into a gas.

Decreasing the temperature of a gas can condense it into a liquid and eventually freeze the liquid into a solid.



Melting Point

This is the **temperature** at which a **solid** turns into a **liquid**.



Evaporation



Condensation