

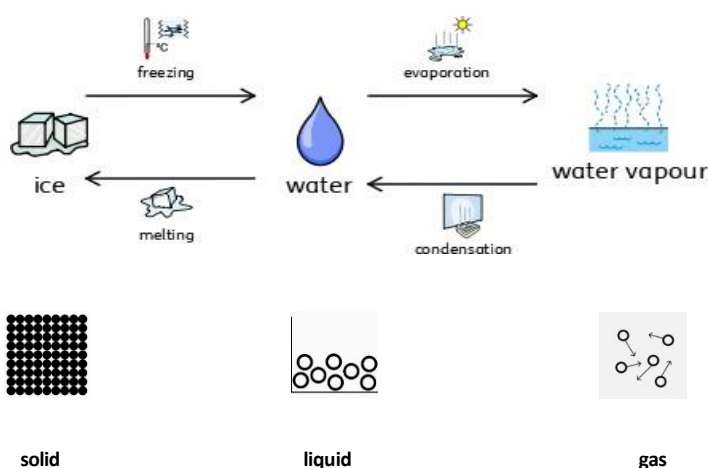
What should I already know?

- Why some materials are used for certain purposes because of their **properties**
- What the **water cycle** is and why it is important

Vocabulary

condensation	small drops of water which form when steam touches a cold surface , such as a window
evaporation	to turn from liquid into gas
freezing	If a liquid or a substance containing a liquid freezes, it becomes solid because of low temperatures
gas	a form of matter that is neither liquid nor solid . A gas rapidly spreads out when it is warmed and comes closer together when it is cooled
liquid	in a form that flows easily and is neither a solid nor a gas .
melting	to change from a solid to a liquid by heating
precipitation	rain, snow, sleet, dew, hail
properties	the ways in which an object behaves
solid	having a firm shape or form
temperature	a measure of how hot or cold something is
water cycle	the process by which water on the earth evaporates , then condenses in the atmosphere, and then returns to earth as precipitation

Diagram



What will I know by the end of the unit?

What is a particle?

- **Particles** are what materials are made from.
- They are so small that we cannot see them with our eyes.

What is a solid?



- In the **solid** state, the material holds its shape.
- **Solids** have **vibrating particles** which are closely packed in and form a regular pattern.
- **Solids** always take up the same amount of space.

What is a liquid?



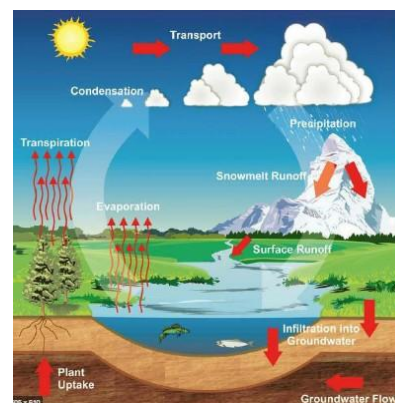
- In the **liquid** state, the material holds the shape of the container it is in.
- This means that **liquids** can change shape, depending on the container.
- **Liquids** have **particles** which are close together but random.
- **Liquid particles** can move over each other.
- **Liquids** can be poured.

What is a gas?



- In the **gas** state, **particles** can escape from open containers.
- **Gases** have **particles** which are spread out and move in all directions.

What is the water cycle?



Investigate!

- Group materials according to their states (solid, liquid or gas)
- Explain the particle structure of solids, liquids and gases.
- Explore the effect of temperature on substances such as chocolate, butter, cream.
- Observe and record evaporation over a period of time, for example, a puddle in the playground or washing on line, and investigate the effect of temperature on washing drying or snowmen melting.