



### What I should already know

- Knowledge from Year 1 and 2 materials
- Describe, group and compare the properties of materials
- Identify and compare the suitability of a variety of everyday materials.

### Working Scientifically

- Group and classify a variety of different materials; explore the effect of temperature on substances such as chocolate, butter, cream
- Research the temperature at which materials change state, for example, when iron melts or when oxygen condenses into a liquid.
- Observe and record evaporation over a period of time, for example, a puddle in the playground or washing on a line,

### Sticky Knowledge

- ♦ Water is **evaporated** by the sun's heat turning it into water vapour. Water vapour rises and then cools down to form water droplets in the sky (**condensation**). When the droplets become too heavy they fall back to earth as rain, snow etc (**precipitation**). The water is collected in lakes, seas, puddles etc and the cycle starts again.
- ♦ Solids, liquids and gases behave differently because their particles behave differently. .
- ♦ Some materials can exist as both liquids and solids due to the process of **melting** and **solidification** e.g. water, rock and metal.
- ♦ When water and other liquids are heated they turn into a **gas** through the process of **evaporation**. **Condensation** is the reverse of **evaporation** and occurs when a gas cools down and turns into a liquid. **Condensation** occurs more in cold conditions.

### Vocabulary

solid	Solids keep their shape unless a force is applied to them. They take up the same amount of space no matter what happens to them.
liquid	Take the <b>shape</b> of a container. They can change shape but do not change the amount of space they take up. They can <b>flow</b> or be poured.
gas	Spread out to fill a container or room they are in. They do not have a <b>fixed shape</b> but do have a <b>mass</b> .
solidify	The process of a <b>liquid</b> becoming hard or solid.
evaporation	The process of a <b>liquid</b> becoming a <b>gas</b> .
condense	When a <b>gas</b> cools down and turns into a <b>liquid</b> .
thermometers	A tool used to measure <b>temperature</b> .
water cycle	The continuous journey water takes from the sky to the land and back to the sky again.
precipitation	The release of <b>water</b> from the sky during the water cycle.