

# Particles and changes of state

## Glossary

**boiling point** – the temperature above which a liquid becomes a gas

**change of state** – the process of change from one state of matter to another

**condensation** – the process of change from a gas into a liquid  
to **condense** - verb

**evaporation** – the process of change from a liquid into a gas  
to **evaporate** - verb

**freezing** – the process of change from a liquid into a solid  
to **freeze** - verb

**freezing point** – the temperature below which a liquid becomes a solid – for water this is 0°C

**gas** – one of the three states of matter. Gases move to fill any available space. The particles in a gas are very far apart from each other and move freely

**Insulate:** materials used to keep the temperature the same. Materials can be ranked as poor or good. These materials make it more difficult for thermal energy to 'escape'.

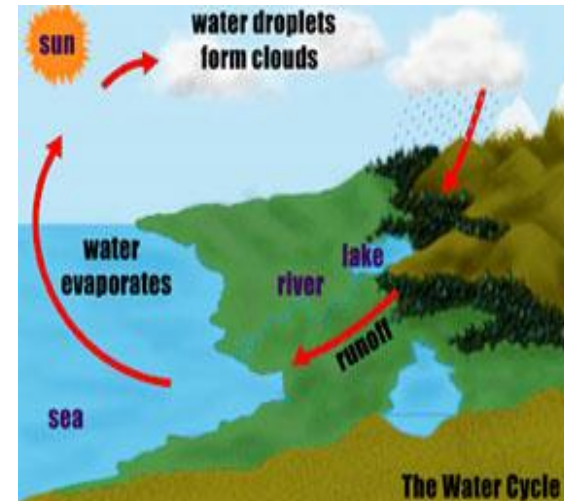
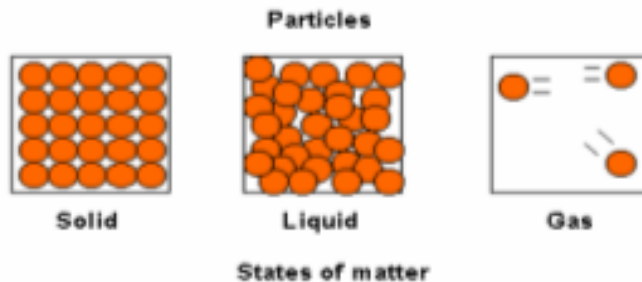


Water changes state

## Changing State



Chocolate changes state. Melted chocolate will **solidify** if left in a cool place – this is called **solidification or freezing**



**liquid** – one of the three states of matter. In a liquid the particles are not as close together as in the solid form. Liquids can be poured and take on the shape of the container they are placed in

**melting** – the process of change from a solid into a liquid  
to **melt** - verb

**melting point** - the temperature above which a solid becomes a liquid

**particles**-almost everything is made of these; they are very small

**solid** – one of the three states of matter. Solids keep their shape. The particles of a solid are very close together

**solidification** – the process of a liquid hardening to form a solid  
to **solidify** - verb

**states of matter** – all material exists in three states – **solid, liquid and gas**

**thermal Conductor:** these materials allow heat to pass through easily. Can be ranked as poor or good.

**Thermometer-** a piece of equipment used to measure temperature

**water cycle** – the cycle of events that occur naturally in the weather systems of the Earth where water moves through its three states