

# Changing State Fact Sheet



This ice is **solid**.

When heat is added, the ice reaches **melting point**.

The ice has completely melted and is now a **liquid**.



Sewage goes to a **sewage treatment works**. Sewage goes through a process of **aeration** to help bacteria digest waste

The **boiling point** of water is **100°C**

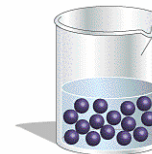


When more heat is added, the water **evaporates** and becomes a **gas**. When the **gas** meets a cold surface it **condenses**, it turns back into a **liquid**.

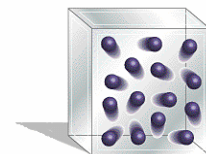
## States of matter



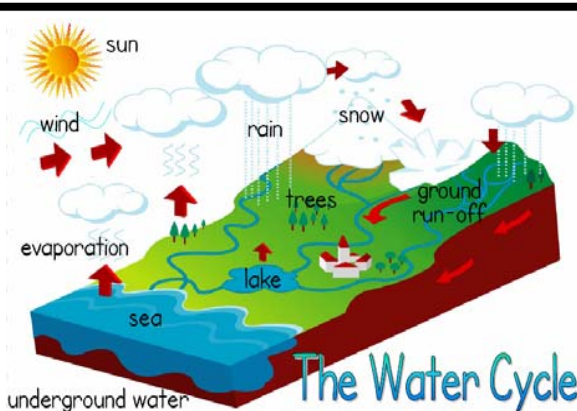
**solid**



**liquid**



**gas**



Drinking water has all dirt and germs removed before it gets to us, this is known as **water**



Melted chocolate will **solidify** if left in a cool place - this is called **solidification**



A pure diamond is an example of a **pure substance**



# Changing State Glossary



**aeration** - in sewage treatment the process of blowing air bubbles through the waste water in order to help bacteria digest waste matter

**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

**evaporation** - the process of change from a liquid into a gas

**freezing** - the process of change from a liquid into a solid

**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

**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

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

**pure substance** - matter that is not a mixture of things

**sewage treatment** - the process of cleaning and purifying sewage water for return to a river, lake or sea

**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

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

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

**water purification** - the process of removing dirt and germs from water to make it drinkable for humans