

Name these changes of state:
Solid → liquid
Liquid → gas
Gas → liquid
Gas → solid
Liquid → solid

Describe how the density of particles changes when wax melts

C1 Particles

C1.1 The Particle Model

Describe how the movement of particles changes when ice melts

Draw a particle diagram for a solid

Describe how the forces of attraction are different in:
Water and ice

Water and steam

Links

→
1.2 Atomic Structure
2.1 Purity and Separating Substances
5.1 Controlling Reactions

Describe how the movement of particles changes when water boils

Draw a particle diagram for a liquid

Draw a particle diagram for a gas

Describe how the density of particles changes when water evaporates

Sketch a graph to show the temperature change when ice is heated from -50°C to 150°C. Label where ice melts and the water boils

Sketch a graph to show the temperature change when steam is cooled from 150°C to -50°C. Label where steam condenses and the water freezes

Similarities

Differences

↑
Explain the shape of this curve

↑
Explain the shape of this curve

Keywords

Write C next to the chemical changes and P next to the physical changes below:

Frying an egg	Melting an ice cube
Dissolving salt in water	Making a cup of tea
Baking a cake	Plants growing
Respiration	Cutting the grass

C1 Particles

Links

C1 The Particle Model

- 1.2 Atomic Structure
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What might you observe if a chemical reaction was occurring?

- 1.
- 2.
- 3.

Why is it easier to separate a mixture of hydrogen molecules and oxygen molecules than to separate the oxygen and hydrogen atoms in water?

Draw a particle diagram showing water evaporating	Draw a particle diagram showing hydrogen gas reacting with oxygen gas to produce liquid water
Similarities	
Differences	

Draw a particle diagram for an element

Draw a particle diagram for a compound

Draw a particle diagram for a mixture

When metals and non-metals react with oxygen, how are the oxides that form different?

What are the typical properties of metals?

What are the typical properties of non-metals?

Keywords