

AQA - Changes of state and particle model – GCSE Combined Science Physics1. **May/2020/Paper_1H/No.5(5.1_5.2)****0 5**

Ice cream is made by cooling a mixture of liquid ingredients until they freeze.

0 5**. 1**

Which statement describes the motion of the particles in solid ice cream?

[1 mark]Tick (✓) **one** box.

They are stationary.

They move freely.

They vibrate about fixed positions.

0 5**. 2**

How do the kinetic energy and the potential energy of the particles change as a liquid is cooled and frozen?

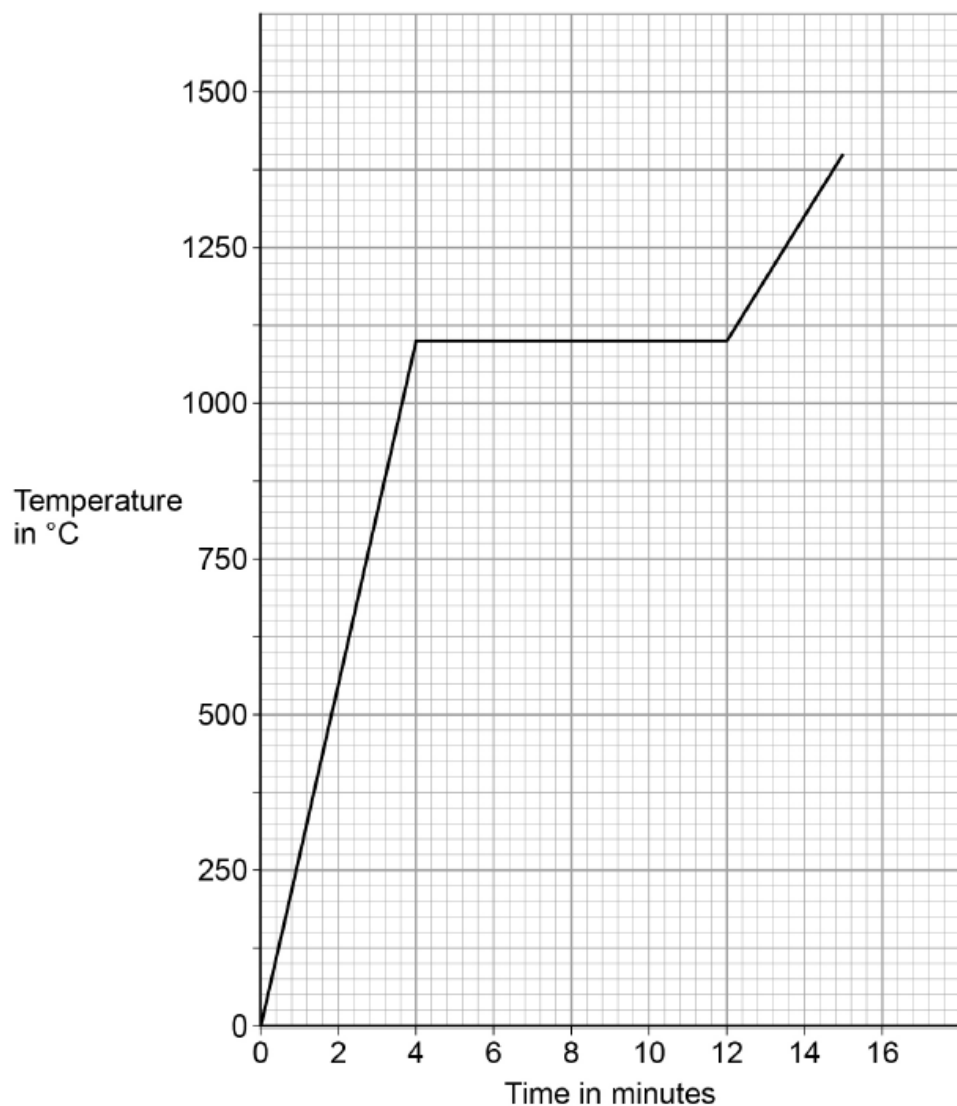
[1 mark]Tick (✓) **one** box.

Kinetic energy	Potential energy	
Decreases	Decreases	<input type="checkbox"/>
Decreases	Does not change	<input type="checkbox"/>
Does not change	Decreases	<input type="checkbox"/>
Does not change	Does not change	<input type="checkbox"/>

2. May/2019/Paper_1F/No.3

Figure 5 shows how the temperature of a small sample of gold changes as it is heated from a solid to a liquid.

Figure 5



0 3 . 4 What is the melting point of the gold?

[1 mark]

Melting point = _____ °C

0 3 . 5 How many minutes did it take for all of the gold in the sample to change from solid to liquid?

[1 mark]

Time taken = _____ minutes

0 3 . 6 What does the gradient of the graph in **Figure 5** represent?

[1 mark]

Tick (✓) **one** box.

The internal energy of the gold

The rate of change of temperature of the gold

The specific heat capacity of the gold