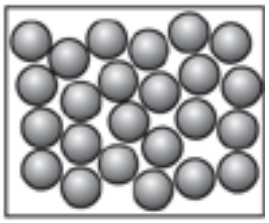
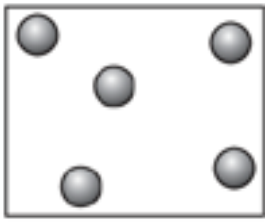
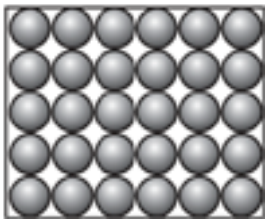
1. Water boils at 100°C and freezes at 0°C.

Draw lines to connect each **temperature** with the **particle model** of water.

Temperature	Particle Model
–5 °C	
25 °C	
110 °C	

[2]

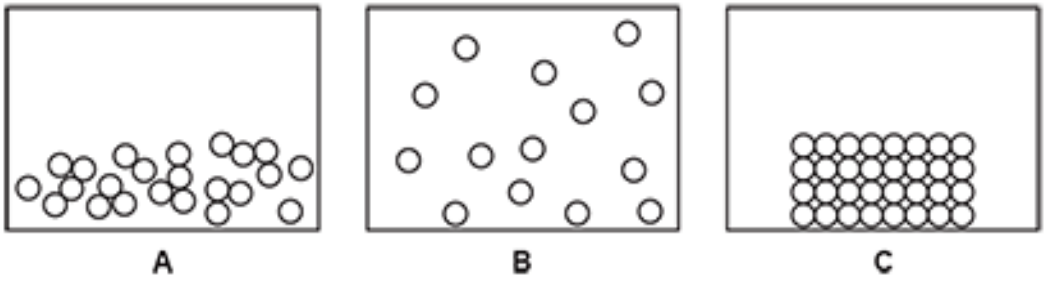
2. Which of these changes is a **chemical** change?

A Ice melting
B Shaping hot metal with a hammer
C Water condensing
D Wood burning

Your answer ☐ **[1]**

3. Oxygen is a gas at room temperature.

i. The diagrams show three different particle models.



Which particle model represents a **gas**?

Tick (✓) **one** box.

A ☐ **B** ☐ **B** ☐

[1]

ii. Oxygen has a melting point of –219 °C and a boiling point of –183 °C.

State a temperature at which oxygen will be a **liquid**.

---

[1]

iii. Complete the sentences about the particle models.

Use words from the list.

condensing	**freezing**	**less**	**melting**	**more**

A liquid becoming a solid is called ..... . In a solid, the particles move ..... than in a liquid. In a solid, the arrangement of particles is ..... random than in a liquid.

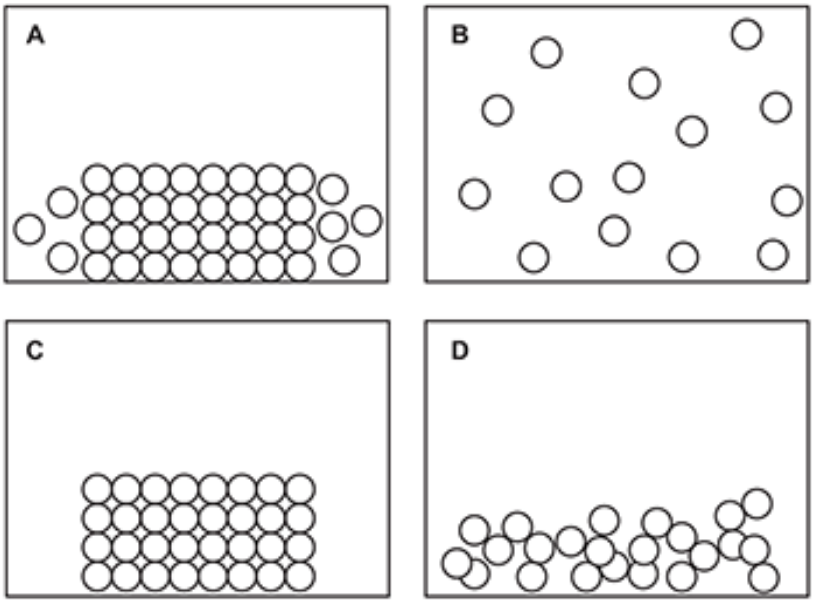
[3]

4. Which description is correct for melting ice?

A There is a chemical change and a change of state.
B There is a chemical change and a reaction occurs.
C There is a physical change and a change of state.
D There is a physical change and a reaction occurs.

Your answer ☐ **[1]**

5. Which particle model diagram shows a gas?



Your answer ☐ **[1]**

END OF QUESTION PAPER