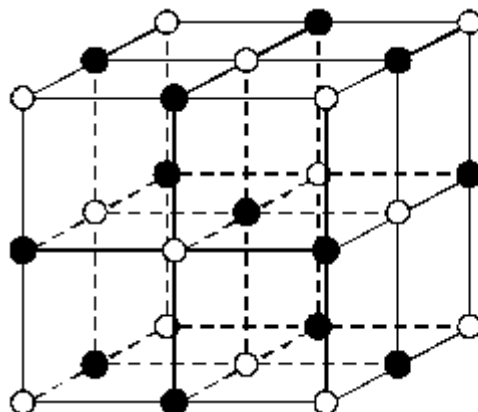


- 1 The diagram shows part of the ionic lattice of a sodium chloride crystal.



- 1 (a) Name the particles represented by the black and clear dots on the diagram.

Sodium ions [1 mark]

Chloride ions [1 mark]

Remember, a chlorine atom
becomes a chloride ion.

(2 marks)

- 1 (a) (i) Solid sodium chloride does not conduct electricity.

Explain why.

Ions/particles cannot move [1 mark]

(1 mark)

- 1 (a) (ii) Sodium chloride has a high melting point.

Explain why.

Strong ionic bonds or electrostatic forces of attraction between
the ions/particles [1 mark]

Lot of energy required to break/overcome them [1 mark]

(2 marks)

(Total 5 marks)