

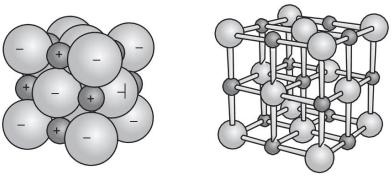
GCSE Chemistry A (Gateway Science) J248/03 C1-C3 and C7 Higher (Higher Tier)

Question Set 9

1 Sodium chloride, NaC*l*, is an ionic compound.

Sodium chloride forms a giant ionic lattice that can be represented using different models.

Look at the diagrams. They show two models of sodium chloride.



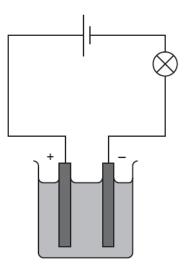
Space-filling model

Ball-and-stick model

(a) (i) A scientist thinks the ball-and-stick model should be used to model ionic compounds.

Describe two limitations of using the ball-and-stick model for ionic compounds. [2]

- (ii) Ionic compounds can also be modelled using a dot-and-cross diagram.Draw a dot and cross diagram to show the ions in sodium chloride.
- (b)* A student investigates the electrolysis of potassium bromide solution.



He notices that different products are formed at each electrode.

Explain the formation of the products during the electrolysis of potassium bromide solution.

Total Marks for Question Set 9: 10

[6]

[2]

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The Periodic Table of the Elements



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