



1 Give the formula of the following ions.

aluminium nitrate zinc(II)

2 Give the formula of the following ionic compounds.

calcium oxide sodium bromide

aluminium sulfate magnesium hydroxide

3 Water is a molecular substance with the molecular formula H_2O .

a What type of bonds are there in water molecules?

b Water boils at $100^\circ C$. Explain why water has a low boiling point.

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c Explain why pure water does not conduct electricity.

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d Explain what the molecular formula H_2O means.

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4 Sodium oxide is an ionic substance with the formula Na_2O .

a What type of bonds are there in sodium oxide?

b Sodium oxide melts at $1132^\circ C$. Explain why sodium oxide has a high melting point.

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c Explain why sodium oxide conducts electricity when molten but not as a solid.

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d Explain what the formula Na_2O means.

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