

**Group 2, the alkaline earth metals – AS 2022 Chemistry P1**

1. June/2022/Paper\_7404/1/No.1

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This question is about ionisation energies of Group 2 elements.

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Explain why the first ionisation energy of the Group 2 elements decreases down the group.

**[2 marks]**

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0	1	.	2
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Give an equation, including state symbols, to represent the process that occurs when the third ionisation energy of magnesium is measured.

**[1 mark]**

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0	1	.	3
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Explain why the third ionisation energy of magnesium is much higher than the second ionisation energy of magnesium.

**[2 marks]**

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2. June/2022/Paper\_7404/1/No.22

Which statement is correct?

[1 mark]

- A** Magnesium reacts with steam to give magnesium oxide as one of the products.
- B** Magnesium acts as an oxidising agent in the extraction of titanium.
- C** Magnesium has a lower melting point than sodium.
- D** Magnesium hydroxide is very soluble in water.