

Thermal Decomposition of Carbonates

Question Paper

Level	Edexcel
Subject	Chemistry
Exam Board	GCSE(9-1)
Topic	Materials from the Earth
Sub Topic	Thermal Decomposition of Carbonates
Booklet	Question Paper

Time Allowed: 10 minutes

Score: /8

Percentage: /100

1 (a) Limestone and marble are naturally occurring forms of calcium carbonate.

(i) Which of the following is the formula of calcium carbonate?

Put a cross (☒) in the box to show your answer.

(1)

A CaCO

B CaCO₂

C CaCO₃

D CaCO₄

(ii) Give a large scale use of limestone.

(1)

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(iii) Marble is an example of a metamorphic rock.

Explain how marble is formed from limestone.

(2)

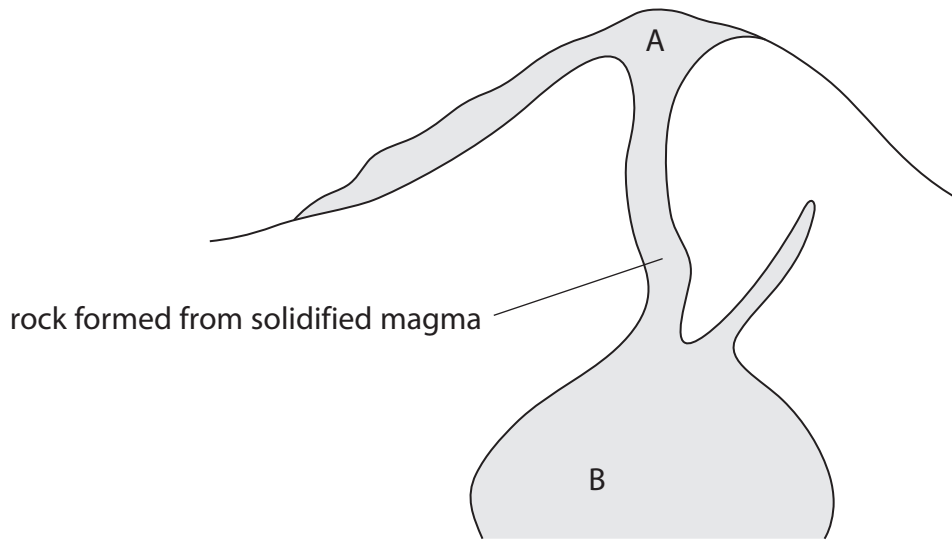
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(b) The diagram shows a cross-section through an extinct volcano.



Millions of years ago, molten magma pushed up to the Earth's surface.

The magma cooled and solidified to form rock.

The rock at A and the rock at B differ in appearance.

(i) Describe the appearance of the rock at A and the rock at B.

(1)

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(ii) Describe how the magma cooled in different ways to form the rock at A and the rock at B.

(1)

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(c) When calcium carbonate is heated calcium oxide is formed.

Calcium oxide reacts with water to form calcium hydroxide.

Write the balanced equation for the reaction of calcium oxide with water to form calcium hydroxide.

(2)

(Total for Question 1 = 8 marks)
