



General Certificate of Secondary Education

Science Single Award Modular 3469

Module 15: Materials & Reactions

Module Test Answer Keys

November 2006 examination series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

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Materials & Reactions : Foundation Tier

Question No.	KEY
One	1 – water (vapour) 2 – sulphur dioxide 3 – carbon dioxide 4 – oxygen
Two	1 – to make water less acidic 2 – to make quicklime 3 – to make cement 4 – to make slaked lime
Three	1 – quicklime 2 – hydrocarbon 3 – haematite 4 – air
Four	1 – atoms 2 – metals 3 – ions 4 – ores
Five	1 – metal Y 2 – metal X 3 – metal W 4 – metal Z
Six	in this experiment, methane reacts with oxygen the colourless droplets in the 'U' tube are water droplets
Seven	ammonia dissolves in water to make an alkaline solution oxidation of carbon monoxide produces carbon dioxide
Eight	8.1 – A, 8.2 – A, 8.3 – A, 8.4 – D
Nine	9.1 – C, 9.2 – A, 9.3 – B, 9.4 – B
Ten	10.1 – A, 10.2 – D, 10.3 – D, 10.4 – D

Materials & Reactions : Higher Tier

Question No.	KEY
One	1 – metal Y 2 – metal X 3 – metal W 4 – metal Z
Two	1 – H 2 – G 3 – F 4 – E
Three	ammonia dissolves in water to make an alkaline solution oxidation of carbon monoxide produces carbon dioxide
Four	M N
Five	5.1 – A, 5.2 – A, 5.3 – A, 5.4 – D
Six	6.1 – C, 6.2 – A, 6.3 – B, 6.4 – B
Seven	7.1 – A, 7.2 – D, 7.3 – D, 7.4 – D
Eight	8.1 – C, 8.2 – D, 8.3 – D, 8.4 – D
Nine	9.1 – A, 9.2 – C, 9.3 – D, 9.4 – C
Ten	10.1 – B, 10.2 – D, 10.3, – C, 10.4 – B