

ALLIANCE

Mark scheme November 2003

# GCSE

## Science (Modular) Double Award and Chemistry

### Module 05

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#### **Metals: Foundation Tier**

Question	Key
One	1 – aluminium
	2 – iron
	3 – chromium
	4 – copper
Two	1 – aluminium oxide
	2 – cryolite
	3 – aluminium
	4 – carbon
Three	1 – atoms
	2 – metals
	3 – ions
	4 – ores
Four	1 – add a little metal oxide to the acid
	2 – metal oxide begins to react with acid to produce a solution of the salt
	3 – continue to add metal oxide until no more will react
	4 – filter to remove excess metal oxide
Five	1 – metal Y
	2 – metal X
	3 – metal W
	4 – metal Z
Six	the main ore of aluminium is bauxite
	the main ore of iron is haematite
Seven	hydrogen forms positive ions
	hydrogen is released when Group 1 metals react with water
Eight	8.1 – B, 8.2 – B, 8.3 – D, 8.4 – D
Nine	9.1 - C, 9.2 - A, 9.3 - B, 9.4 - B
Ten	10.1 – D, 10.2 – D, 10.3 – A, 10.4 – D

### Metals: Higher Tier

Question	Key
One	1 – metal Y
	2 – metal X
	3 – metal W
	4 – metal Z
Two	1 – copper nitrate
	2 – copper oxide
	3 – copper chloride
	4 – copper
Three	hydrogen forms positive ions
	hydrogen is released when Group 1 metals react with water
Four	magnesium atoms become magnesium ions
	the magnesium plate will gradually become thinner
Five	5.1 – B, 5.2 – B, 5.3 – D, 5.4 – D
Six	6.1 - C, 6.2 - A, 6.3 - B, 6.4 - B
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Seven	7.1 – D, 7.2 – D, 7.3 – A, 7.4 – D
Eight	8.1 - B, 8.2 - A, 8.3 - C, 8.4 - C
Nine	9.1 - C, 9.2 - C, 9.3 - B, 9.4 - B
Ten	10.1 - C, $10.2 - B$ , $10.3 - B$ , $10.4 - B$