



ASSESSMENT and
QUALIFICATIONS
ALLIANCE

Mark scheme
March 2003

GCSE

Science (Modular) Double Award
and Chemistry (Modular)

Module 05

Metals: Foundation Tier

Question	Key
One	1 – mercury 2 – iron 3 – magnesium 4 – potassium
Two	1 – conduct 2 – cut 3 – corrode 4 – melt
Three	1 – electrolysis 2 – thermal decomposition 3 – oxidation 4 – neutralisation
Four	1 – S – iron ore, coke and limestone are put into the furnace 2 – R – coke burns to form carbon dioxide 3 – P – carbon dioxide reacts with coke to produce carbon monoxide 4 – Q – carbon monoxide reacts with iron oxide to produce iron
Five	1 – metal M 2 – metal N 3 – metal L 4 – metal K
Six	it bends and shapes easily it is a good conductor of electricity
Seven	ammonia sodium hydroxide
Eight	8.1 – D, 8.2 – C, 8.3 – A, 8.4 – A
Nine	9.1 – C, 9.2 – B, 9.3 – A, 9.4 – B
Ten	10.1 – A, 10.2 – A, 10.3 – B, 10.4 – B

Metals: Higher Tier

Question	Key
One	1 – metal M 2 – metal N 3 – metal L 4 – metal K
Two	1 – carbon monoxide 2 – carbon dioxide 3 – hydrogen 4 – water
Three	ammonia sodium hydroxide
Four	R – sodium hydroxide and sulphuric acid react to produce the salt, sodium sulphate S – sodium hydroxide solution is alkaline because it contains OH ⁻ (aq) ions
Five	5.1 – D, 5.2 – C, 5.3 – A, 5.4 – A
Six	6.1 – C, 6.2 – B, 6.3 – A, 6.4 – B
Seven	7.1 – A, 7.2 – A, 7.3 – B, 7.4 – B
Eight	8.1 – B, 8.2 – B, 8.3 – A, 8.4 – C
Nine	9.1 – C, 9.2 – B, 9.3 – A, 9.4 – C
Ten	10.1 – A, 10.2 – B, 10.3 – C, 10.4 – B