



Rewarding Learning

General Certificate of Secondary Education
2011–2012

Science: Double Award (Modular)

Using Materials and Understanding Reactions

End of Module Test

Higher Tier

[GDB02]

TUESDAY 28 FEBRUARY 2012

11.00 am–11.45 am

**MARK
SCHEME**

			AVAILABLE MARKS
1	(a) (i) NaHCO_3	[1]	4
	(ii) FeSO_4	[1]	
	(b) 6	[1]	
	(c) Zinc carbonate	[1]	
2	(a) Number of protons and neutrons [1] in (the nucleus of) an atom [1] or in the nucleus unless wrongly qualified	[2]	5
	(b) protons 15	[1]	
	electrons 15	[1]	
	neutrons $31 - 15 = 16$	[1]	
3	(a) 2,8 arrangement for sodium	[1]	3
	2,8 arrangement for oxygen	[1]	
	(b) Na_2O	[1]	
4	(a) metal oxide, non-metal oxide	[2]	4
	(b) carbon monoxide/water/any suitable	[1]	
	(c) alkali	[1]	
5	(a) nitrogen	[1]	4
	(b) as temp. increase solubility decreases [1] for (all) gases [1]	[2]	
	(c) there is less oxygen (dissolved) in the water	[1]	
6	(a) electrolysis	[1]	4
	(b) cathode NOT negative	[1]	
	(c) oxygen, carbon dioxide	[2]	

