MARK SCHEME for the May/June 2012 question paper

for the guidance of teachers

0620 CHEMISTRY

0620/63

Paper 6 (Alternative to Practical), maximum raw mark 60

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

• Cambridge will not enter into discussions or correspondence in connection with these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2012 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



	Page 2	Mark Scheme: Teachers' version IGCSE – May/June 2012	Syllabus 0620	Paper 63		
1	(a) teat/dro	pping pipette/dropper (1) allow : pipette	0020	03[1]		
•		[']				
		ore would have larger surface area (1) nc oxide would have formed/faster decomposition (1)		[2]		
	(c) sulfuric	(1)		[1]		
	(d) filtration	(1)		[1]		
	(e) add mag	gnesium (1) allow : electrolysis		[1]		
				[Total: 6]		
2	bromine (water) (1) not: bromide colourless (1) aqueous silver nitrate (1) yellow precipitate (1) named indicator/solution of copper salt (1) correct colour change/pH/blue precipitate (1)					
	correct colot	ar change/ph/blue precipitate (1)		[6]		
				[Total: 6]		
3		s completed correctly 5, 52, 56, 54, 60, 60 –1 for each incorrect		[3]		
		lotted correctly (3) –1 for each incorrect curve (1)		[4]		
	(c) point at	100 seconds/54 cm ³ /point 6 (1) off curve/owtte (1)		[2]		
	(d) 20 cm ³ :	±½ small square (1) indication on graph (1)		[2]		
	(e) reaction	finished/all peroxide decomposed owtte (1)		[1]		
	(f) (i) in a	n ice bath (1) allow : in a refrigerator		[1]		
	(ii) cur	ve less steep (1) to same level (1)		[2]		
				[Total: 15]		

	Page 3			Mark Scheme: Teachers' version	Syllabus	Paper	
	(a) ninotto/h		- t t o /b	IGCSE – May/June 2012		0620	63 [1]
4	(a)	(a) pipette/burette (1)					
	(b)	(i)	meth	nyl orange/phenolphthalein/litmus (1) n	ot : Universal	Indicator	
		(ii)	yello	w/pink to orange or pink/colourless (1)			[2]
	(c)	nitri	ic acio	d (1) more volume added than sodium	hydroxide (1)		[2]
	(d)			xperiment (1) without indicator (1) e solution (1)			[3]
			.p = 1 = 1				[Total: 8]
5	(c)	bub	bles/	fizz/effervescence (1)			[1]
	(-)			er (1) milky (1)			[2]
	(d)	(i)	blue	(1) precipitate (1)			[2]
		(ii)		precipitate (1)			[1]
			uark	/deep blue (1) solution/dissolves (1)			[2]
	(e)	bar	ium/c	alcium (1) chloride (1) not : chlorine ion	s		[2]
							[Total: 10]
6	(a)	Bur	nsen l	ourner (1) ignore: switch			[1]
	(b)	labe	els or	correct positions (1)			[1]
	(c)	(i)	bulb	lights/idea of molten lead (1)			
		(ii)	bulb	goes out/no fizz (1)			[2]
	<i>.</i>						
	(d)	pre	ssure	of gas build up/explode owtte (1)			[1]
	(e)	iodi	ne fo	rmed (1) not : iodide from iodide ions (1)		[2]
	(f)			booard/well ventilated area (1)			54 3
		alic	w gio	oves if reason specified ignore : goggl	es		[1]
							[Total: 8]

	Page 4	Mark Scheme: Teachers' version	Syllabus	Paper
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7	add to sa + bean (nass/weight (1) of each fertiliser (1) ame amount of soil (1) 1) water (1) specified time (1) observe plant growth/effect (1)		
		son/conclusion (1) max 7		[7]

[Total: 7]