

International General Certificate of Secondary Education

MARK SCHEME for the June 2005 question paper

0620 CHEMISTRY

0620/06

Paper 6 (Alternative to Practical), maximum mark 60

MMM. Hiremepapers.com

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which Examiners were initially instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the *Report on the Examination*.

• CIE will not enter into discussion or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the June 2005 question papers for most IGCSE and GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



UNIVERSITY of CAMBRIDGE International Examinations

Grade thresholds for Syllabus 0620 (Chemistry) in the June 2005 examination.

	maximum	minimum mark required for grade:				
	mark available	А	С	Е	F	
Component 6	60	48	38	27	22	

The threshold (minimum mark) for B is set halfway between those for Grades A and C. The threshold (minimum mark) for D is set halfway between those for Grades C and E. The threshold (minimum mark) for G is set as many marks below the F threshold as the E threshold is above it.

Grade A* does not exist at the level of an individual component.



June 2005

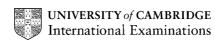
IGCSE

MARK SCHEME

MAXIMUM MARK: 60

SYLLABUS/COMPONENT: 0620/06

CHEMISTRY Alternative to Practical



	Page 1	Mark Scheme	Syllabus	Paper 6			
1	(a) boxes	IGCSE – JUNE 2005 0620 (a) boxes completed retort/clamp stand (1) (teat) pipette/dropper (1) Bunsen burner (1)					
	(b) hydra	tion/exothermic (1)		[1]			
2	(a) electr) electrodes correctly labelled on rods (1)					
	• •	(b) bubbles at positive electrode (1), bubbles at negative electrode (1) bulb lights up/smells of bleach/greenish gas (1)					
	(c) (i) c	hlorine (1)		[1]			
	(ii) li	tmus/indicator (1) bleached/colourless (1)		[2]			
3	volumes f	rom syringe diagrams;					
	15, 45, 61	, 73, 74, 80 and 80 all correct (4) (-1 for eac	ch incorrect)	[4]			
	(a) graph	ints plotted correctly (3) (-1 for each incorrect)					
	•	th curve (1)		[4]			
	(b) volum	ne of acid from graph, $10.5 \rightarrow 11.5$ (1)		[1]			
	(c) volum	ne of hydrogen from graph, $29.5 \rightarrow 30.5$ (1)		[1]			
4	table of re	table of results:					
	all initial and final volume boxes correctly completed 0.0, 10.6, 14.9 36.1 (3)						
	difference	[4]					
	(a) neutra	alisation (1)		[1]			
	(b) (i) e	experiment 2 (1)		[1]			
	(ii) e	[2]					
	(iii) N	I more concentrated/stronger than N (1) x 2 (1)		[2]			
	(c) 21.2	(1) $cm^{3}(1)$					
	twice as much calcium hydroxide (1)						
	(d) e.g. u	(d) e.g. use a pipette/burette instead of a measuring cylinder (1)					
5	(b) (i) fi	zz/bubbles (1) pops (1)		[2]			
	(ii) fi	zz/bubbles (1) limewater milky (1)		[2]			
	(c) weak	(1)		[1]			

	Page 2		Mark Scheme		Syllabus	Paper
			IGCSE – JUNE 2005		0620	6
	(d) (i)	hydrogen (1)				[1]
	(ii)	(ii) carbon dioxide (1)				
	(e) cop	per (1) 2+ (1)				[2]
6	(a) no/l) no/little water present/little water implied (1)				
	(b) any value less than 7 (1)					
	(c) chro	omatography (1)	apply to paper (1)	use of solvent	(1)	
	des	cription of two yel	low spots (1)			[4]
	рар	er in drink = max	2			
7	(a) stra	ight line (1)	DRAWN WITH A RU	LER		[1]
	(b) inac	curate point is at pH 5 (1) not on line (1)				
	(c) % c	orrosion decrease	es as pH increases (1)			[1]
8	same ar	nount/measured	volume of peroxide (1)			
	add known mass of metal oxide (1)					
	time (1) measure volume of oxygen (1)					
	repeat with other oxide (1) compare/conclusion (1)					[6]
	method will not work = 0					

Total 60