## UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

## MARK SCHEME for the November 2005 question paper

## 0620 CHEMISTRY

0620/06

Paper 6 (Alternative to Practical), maximum mark 60

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*.

The minimum marks in these components needed for various grades were previously published with these mark schemes, but are now instead included in the Report on the Examination for this session.

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

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



Page 1	Mark Scheme	Syllabus	Paper
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1	(a)	boxes filled in correct	ly to show:			
		measuring cylinder (1	)			
		spatula (1)				
		beaker (1)		[3]		
	(b)	blue		[1]		
	(c)	heat (1)				
		to crystallising point (	1)	[2]		
2	(a)	electrodes correctly la	abelled	[1]		
	(b)	bubbles at positive/ne	egative electrode (1)			
		bulb lights up (1)		[2]		
	(c)	lighted splint (1)				
		pops (1)		[2]		
3	(a)	pestle (1) and mortar	(1)	[2]		
	(b)	chlorophyll more soluble in ethanol or similar		[1]		
	(c)	filtration		[1]		
	(d)	chromatography (1),	paper (1), add pigments (1), use of solvent (1)	[4]		
4		Table of results:				
		volumes of gas corre - 1 for each incorrect	ctly completed (21, 24, 39, 47 and 56)	[3]		
	(a)	points correctly plotte	d in graph (3), - 1 for each incorrect			
		straight line (1)		[4]		
	(b)	experiment 2 (1)				
		not on line (1)		[2]		
	(c)	(i) experiment 5	(1)			
		(ii) strongest/mor	e concentrated acid (1)			
		more collision	s (1)	[3]		
	(d)	marble chip visible (1	)			
		acid used up (1)		[2]		

F	Page 2		Mark Scheme	Syllabus	Paper
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(	(e) (i) e.g. size of chips different/starting the timer				[1]
		(ii)	measure mass of chips/time individual experiment	ts	[1]
5 (	(b)	(i)	white (1)		
			precipitate (1)		
			dissolves (1)		[3]
		(ii)	white (1)		
			precipitate (1)		
			insoluble (1)		[3]
(	(c)	acid (	gas/named/hydrated salt		[1]
(	(d)	not a	ot a sulphate (1)		
		not a	halide (1)	[2]	
(	(e)	ammo	ammonia		
(	(f)	nitrate	nitrate (1)		
		hydra	ited/water (1)		[2]
6 (	(a)	2 arro	ows in correct positions (1) each		[2]
(	(b)	brom	ine (water) (1)		
		goes	colourless (1)		[2]
(	(c)	suck-	suck-back problem		
7 (	(a)	soil sample + water (1)			
		stir/h	eat (1)		
		filter (	(1)		
		add L	add Universal Indicator (1)		
		chart	(1)		[5]
(	(b)	more	samples (1)		
		differe	ent parts of field (1)		[2]
					Total 60