## UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

**International General Certificate of Secondary Education** 

## MARK SCHEME for the October/November 2011 question paper for the guidance of teachers

## 0620 CHEMISTRY

0620/63

Paper 6 (Alternative to Chemistry), 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 October/November 2011 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

	· · ·	90 =	IGCSE – October/November 2011	0620	63		
1	(a)	funnel (1) stirrer/glass rod (1) evaporating dish (1)					
	(b)	filtration	(1)		[1]		
	(c)	<b>C/A</b> (1)			[1]		
2	(a)		tures correctly recorded (3) -1 for each incorrect 44, 29, 31				
			ture rises correct (1) 19, 4, 6		[4]		
	(b)	bars con	ate scale for y axis (1) <b>note</b> must be greater than hatect heights (2) plotting final temps = max 2 elled correctly (1) no bar chart = max 1	alf of grid	[4]		
	(c)	(i) calc	ium (1)		[1]		
			emperature rise (1) eaction/unreactive (1) <b>not</b> low/less reactive		[2]		
	(d)	least	order of reactivity (2), two in wrong order (1) copper iron zinc magnesium calcium		[2]		
	(e)		ture changes/rises would be less/lower/half (1) d/volume (1)		[2]		
3	(a)	smooth	curve missing anomalous points (1)		[1]		
	(b)	at 20 °C	(1)		[1]		
	(c)	decrease	es (1)		[1]		
	(d)	line sket	ched below original curve (1)		[1]		
4	(c)	final read	results adings completed correctly 0.0, 1.9, 11.1 (1) dings completed correctly 10.4, 22.7, 16.3 (1) all es completed correctly 10.4, 20.8, 5.2 (1)	I readings to 1 dp (1	) [4]		

Mark Scheme: Teachers' version

Syllabus

Paper

Page 2

Page 3			Mark Scheme: Teachers' version S IGCSE – October/November 2011		Syllabus	Paper			
			IG	CSE – Octo	ber/Nover	mber 2011		0620	63
(d)	pink	k (1) to	o colourle:	ss(1) <b>not</b> cle	ear				[2]
(e)	neu	ıtralisa	ation/exoth	nermic (1)					[1]
(f)	(i)	C/3 s	smallest, E	3/2 largest (1	1)				[1]
	(ii)	order	ris C/3, A	/1, B/2 (2) o	ne correct	= 1			[2]
(g)	Exp	erime	ent 2 2x vo	lume Exper	iment 1 or	converse (1)			[1]
(h)	10.4	4 (1) c	cm <sup>3</sup> (1) <b>all</b> o	ow ecf from	(c)				[2]
(i)	use	a pipe	ette/buret	te					[1]
(j)			owtte (1) e in conce	entration/tem	nperature h	as no effect o	on quantiti	ies/only affe	cts speed (1) [2]
(k)	san	ne met	thod using	l that would g different ac d (1) result (	cids = 0	cise details n	ot needed	I	[3]
	mea	asure t	temperati	oxide add n ure change ( rongest/mor	(1)	(1) rated solution	(1)		
	filte	r preci	ipitate (1)		,	metal salt so	, ,		
(a)	(i)	yellov	w/brown/c	range (1)					[1]
(b)	(i)	no ch	nange/no	reaction/owt	tte (1)				[1]
	(ii)	white	(1) preci	oitate (1)					[2]
	(iii)	browi	n (1) prec	ipitate (1)					[2]
	(iv)	brown	n precipita	ate (1)					[1]
(d)	carl	bon di	oxide (1)						[1]
(e)				n carbonate I/named me		dium (1)			[2]

5

	Page 4	Mark Scheme: Teachers' version	Syllabus	Paper
		IGCSE – October/November 2011	0620	63
6	(a) substand	ce/liquid that dissolves/owtte (1)		[1]
	(b) (in)flamn	nable/catches fire easily (1)		[1]
	(c) fractiona	al distillation (1)		[1]
	apply sp	ography (1) ot of oil to paper (1) use of solvent (1) on of process (1) results (1)		max [4]

[Total: 60]