

**CAMBRIDGE**  
INTERNATIONAL EXAMINATIONS

November 2003

**INTERNATIONAL GCSE**

MARK SCHEME

MAXIMUM MARK: 40

SYLLABUS/COMPONENT: 0620/05

CHEMISTRY  
Practical



Question Number	0620/05 MARK SCHEME DETAILS November 2003	Part Mark
1	Times recorded in seconds in table	(1)
	Times increasing in magnitude	(1)
	Comparable to Supervisor's results	(2) 4
(a)	Suitable scale for time/s	(1)
	Points plotted correctly	(2)
	-1 for each incorrect	
	Smooth line graph	(1) 4
(b)	colourless	(1)
	to blue/purple	(1) 2
(c)	Estimate read from graph	(1)
	Unit	(1) 2
	Indication correct on graph	(1) 1
(d) (i)	Experiment 1	(1) 1
(ii)	Greatest concentration of bromate	(1)
	therefore more collisions	(1) 2
(e) (i)	Two sources of error	(2)
	e.g. inaccurate measurement of named liquid into beaker/stopping timer at same colour level/timing problem – <u>not</u> use of timer	2
(ii)	Two improvements	(2)
	e.g. use a burette/use a colorimeter/read and average	2
<b>Sub-total = 20</b>		
2 (a)	yellow/brown/orange	(1) 1
(b) (i)	orange/brown	(1)
	precipitate	(1)
	remains/insoluble in excess	(1) 3
(ii)	Litmus → blue/indicator pH > 7	(1)
	smell of gas	(1) 2
(c)	orange/brown	(1)
	precipitate	(1)
	remains/insoluble in excess	(1) 3

(d)	fizz/bubbles etc	(1)	
	lighted splint	(1)	
	pops	(1)	3
	green	(1)	
	precipitate	(1)	
			2
(e)	white	(1)	
	precipitate	(1)	
			2
(f)	iron(III) = 2 marks, iron only = 1 mark	(2)	
	ammonium	(1)	
	sulphate	(1)	
	or correct formulae		4

**Sub-total = 20**

**Total for paper = 40**