## **CAMBRIDGE INTERNATIONAL EXAMINATIONS**

**Cambridge International General Certificate of Secondary Education** 

## MARK SCHEME for the October/November 2014 series

## 0620 CHEMISTRY

0620/53

Paper 5 (Practical), maximum raw mark 40

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Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

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Page 2	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2014	0620	53

1

(d) table of results initial temperature boxes completed correctly (1) final temperature boxes correctly completed (1) differences correct (1) include minus signs comparable to supervisors (1) [4] (e) bubbles / fizzing / effervescence (1) [2] blue precipitate (1) (f) all bars at correct levels (2), suitable scale (1) labels (1) [4] (g) (i) experiment 2 (1) [1] (ii) experiments 2 and 3 (1) temperature decreased (1) [2] (h) (i) half temperature change / half value in table (1) [1] (ii) half temperature change / half value in table (1) [1] (iii) half amount of solid used (1) [1] (i) room temperature / value from table (1) finished dissolving / reacting (1) [2] (j) carbonate (1) carbon dioxide (1) acid (1)  $Cu^{2+}(1)$ max [2]

Page 3	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2014	0620	53

## 2 tests on solution M

(a)	colourless see test <b>(e) ignore</b> clear pH 1–3 (1)	[1]
(b)	bubbles (1) lighted splint goes out (1)	[2]
(c)	fizz / bubbles etc. (1) lighted splint (1) pops (1)	[3]
(d)	white (1) precipitate (1)	[2]
(e)	appearance colourless (1) must have <b>(a)</b> correct as well pH 11–14 (1)	[1] [1]
(f)	colourless / no change (1) with excess white (1) precipitate (1)	[3]
(g)	litmus paper turns blue (1) pungent smell (1) do not allow: strong	[2]
(h)	(i) hydrogen (1)	[1]
	(ii) ammonia (1)	[1]
(i)	hydrochloric acid (2) note: acid / chloride only (1)	[2]
(j)	(sodium / potassium) hydroxide (1)	[1]