

Cambridge International Examinations

Cambridge International General Certificate of Secondary Education

CHEMISTRY 0620/62

Paper 6 Alternative to Practical

October/November 2016

MARK SCHEME
Maximum Mark: 40

Published

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Page 2	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2016	0620	62

Question	Answer	Mark
1(a)	(liebig) condenser tripod	1 1
1(b)	sodium chloride crystals: C water: D silver chloride: A	1 1 1
1(c)	chromatography	1

Question	Answer	Mark
2(a)	table of results volume boxes completed correctly (30), 44, 57, 62, 78, 85, 88, 89, 90, 90	2
2(b)	all points correctly plotted smooth line graph	2
2(c)(i)	point at 60 s/62 cm ³ /fourth point/measurement 4	1
2(c)(ii)	misread measuring cylinder/read too early	1
2(c)(iii)	value from graph (68–70) shown clearly	1
2(d)	the Reaction has finished all the <u>acid</u> has reacted/HC1 is the limiting factor	1
2(e)(i)	value from graph or table (57–44 = 13 cm ³)	1
2(e)(ii)	13/20=0.65 cm ³ /s	1

Page 3	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2016	0620	62

Question	Answer	Mark
2(f)	steeper curve to same level	1
2(g)	air is displaced (when the acid is added)	1
2(h)	improvement explanation	1 1
	use a burette/graduated pipette/gas syringe improves accuracy OR use cotton thread to hold a test-tube (containing the acid) in the flask no air is collected OR repeat the experiment take average/more frequent readings	

Page 4	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2016	0620	62

Question	Answer	Mark
3(a)(i)	pH 1–3	1
3(a)(ii)	solid disappears/dissolves blue/green colour	1 1
3(a)(iii)	solid dissolves limewater turns milky	1 1 1
3(a)(iv)	white precipitate	1
3(b)	iron(III) nitrate	1

Page 5	Mark Scheme	Syllabus	Paper
	Cambridge IGCSE – October/November 2016	0620	62

Question	Answer	Mark
4	clean/sandpaper the metal ring dissolve copper(II) sulfate in water/copper(II) sulfate solution set up circuit/switch on electricity/complete circuit copper rod anode(+ve electrode) metal ring cathode(-ve electrode) rotate the metal ring/agitate remove the metal ring, wash and dry	6