



**Cambridge International Examinations**  
Cambridge International General Certificate of Secondary Education

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**CHEMISTRY**

**0620/53**

Paper 5 Practical Test

**October/November 2016**

MARK SCHEME

Maximum Mark: 40

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**Published**

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<b>Question</b>	<b>Answer</b>	<b>Mark</b>
1(a)	table of results for Experiment 1 temperature boxes completed correctly results comparable to supervisor's	<b>1</b> <b>1</b>
1(b)	table of results for Experiment 2 temperature boxes completed correctly results comparable to supervisor's	<b>1</b> <b>1</b>
1(c)	all points correctly plotted $\pm$ half a small square smooth line graphs labelled	<b>2</b> <b>1</b> <b>1</b>
1(d)(i)	value from graph – 60 s	<b>1</b> <b>1</b>
1(d)(ii)	value from graph shown clearly	<b>1</b> <b>1</b>
1(e)	room temperature or initial temperature from results table reaction has finished / stopped	<b>1</b> <b>1</b>
1(f)	more readings / points / data smoother curve / better or more accurate graph	<b>1</b> <b>1</b>
1(g)	polystyrene is an insulator / copper is a (good) conductor reduced heat losses	<b>1</b> <b>1</b>

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<b>Question</b>	<b>Answer</b>	<b>Mark</b>
2(a)(i)	pH 0–3	<b>1</b>
2(a)(ii)	effervescence / bubbles / fizzes lighted splint 'pops'	<b>1</b> <b>1</b>
2(a)(iii)	effervescence / bubbles / fizzes limewater turns milky	<b>1</b> <b>1</b>
2(a)(iv)	white precipitate	<b>1</b>
2(b)(i)	pH 10–14	<b>1</b>
2(b)(ii)	white precipitate insoluble / no change	<b>1</b> <b>1</b>
2(b)(iii)	brown precipitate	<b>1</b> <b>1</b>
2(b)(iv)	green precipitate	<b>1</b>
2(c)	sulfuric acid	<b>1</b> <b>1</b>
2(d)	calcium hydroxide	<b>1</b> <b>1</b>

Page 4	Mark Scheme	Syllabus	Paper
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Question	Answer	Mark
3	<p><b>silica</b> filter (the cleaner) wash the residue dry the residue</p> <p><b>water</b> heat (the filtrate / cleaner) condense the vapour</p> <p><b>sodium carbonate</b> heat to dryness / no liquid left (then solid) sodium carbonate is left</p> <p><b>OR</b> heat until saturated then cool to crystallise / leave to crystallise</p>	6