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Cambridge International General Certificate of Secondary Education

CHEMISTRY

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Paper 5 Practical

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MARK SCHEME

Maximum Mark: 40

Published

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Question	Answer	Marks
1(a)	initial and final temperature boxes completed AND results ascending in magnitude with more solid S added	1
	results comparable to the supervisor's	1
1(b)	initial and final temperature boxes completed AND results ascending in magnitude with more solid T added	1
	results comparable to the supervisor's	1
1(c)	all points plotted	2
	two straight lines of best fit drawn with a ruler	1
	both graphs appropriately labelled	1
1(d)(i)	value from graph	1
	shown clearly	1
1(d)ii	value from graph	1
	shown clearly	1
1(e)	exothermic	1
1(f)	<i>change to the experiments</i> use burette/pipette use insulation/lid use a new cup / dry the cup	1
	<i>explanation (to match change)</i> more accurate (than measuring cylinder) reduce heat losses remove water left from the previous experiment	1
1(g)	repeat experiments	1

Question	Answer	Marks
1(h)	lower temperatures measured / smaller temperature changes	1
	changed is halved / more water (to heat)	1

Question	Answer	Marks
2(a)	white (crystals)	1
2(b)	bubbles / fizz	1
	limewater	1
	(turns) milky	1
2(c)	carbon dioxide	1
2(d)	yellow	1
2(e)	sodium	1
	carbonate	1
2(f)	white	1
	precipitate	1
2(g)(i)	white	1
	precipitate	1

Question	Answer	Marks
2(g)(ii)	dissolves / clears / soluble	1
	bubbles / fizz / effervescence	1
2(h)	non-transition metal / Group II metal / barium / calcium / magnesium	1
	chloride	1

Question	Answer	Marks
3	<i>max [6]:</i> M1 weigh specified number of nail(s) / specified number of nails M2 immerse in same volume M3 samples of tap water and distilled water (in two test-tubes) M4 for suitable time M5 dry (in oven) M6 reweigh nails M7 compare / conclusion	6