UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the October/November 2010 question paper for the guidance of teachers

0620 CHEMISTRY

0620/52 Paper 5 (Practical), maximum raw mark 40

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1 **(a)** Table of results for *Experiment 1*
initial temperature boxes completed correctly (1)
other temperature boxes correctly completed (1)
comparable to supervisors (1) i.e. decreasing [3]

(b) Table of results for *Experiment 2*
initial/final temperature boxes completed correctly (1)
comparable to supervisors (1) i.e. increasing [2]

(c) all points correctly plotted (3), –1 for any incorrect
best fit straight line graphs drawn with a ruler (2)
labels (1) [6]

(d) **(i)** value from graph (1) shown clearly (1) [2]

(ii) value from graph (1) shown clearly (1) [2]

(e) endothermic [1]

(f) temperature (changes) would be smaller owtte (1)
more water (1) ignore references to rate [2]

(g) solid would dissolve/react slower or take longer to observe final temperature (1)
smaller surface area (1) [2]

(h) lag apparatus/use a lid or insulate /use digital thermometer/
use a pipette or burette instead of measuring cylinder/use data logging device owtte
not repeat and average [1]

[Total: 21]

2 **(a)** yellow (1) precipitate (1) [2]

(b) white (precipitate) [1]

(c) effervescence/fizz/bubbles (1)
pH paper blue/purple/> 7 (1)
smell (1) max 2 ignore references to hydrogen [2]

(d) yellow/brown/orange colour hot (1)
faded/goes white when cool (1) [2]

(e) bubbles/fizz etc (1)
limewater turns milky (1) [2]

(f) **(i)** white precipitate (1)
dissolves/clears (1) [2]

(ii) white precipitate (1)
dissolves/clears (1) see Supervisor's report [2]

(g) ammonia ignore hydrogen [1]

(h) silver/lead (1)
nitrate (1) [2]

(i) zinc (1) allow aluminium dependent on **(f) (ii)**
gives off carbon dioxide (when acid added) (1)
carbonate (1) [3]

[Total: 19]