CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the October/November 2012 series

0620 CHEMISTRY

0620/51 Paper 5 (Practical), maximum raw mark 40

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

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

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2012 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

CAMBRIDGE
International Examinations

1 **(e)** Table of results for Experiments

all initial temperature boxes completed correctly as instructed (1)

all final temperature boxes completed correctly not more than 20 °C below original (1)

all average temperatures completed correctly (1)

times completed in seconds (1) **ignore:** dps

descending in order (comparable to supervisor) (1) [5]

(f) points plotted correctly (4)

smooth line graph (1) [5]

(g) average temperature 72 °C (1)

value from graph (1)

extrapolation shown on grid (1) [3]

(h) as an indicator/check presence of iodine owtte (1) [1]

(i) **(i)** experiment 5/when temperature is 70 (1) [1]

(ii) highest temperature (1)

particles have more energy/more collisions (1) [2]

(j) time longer/more/increase (1)

speed slower/decrease (1) [2]

(k) more accurate (1) [1]

2 **(a)** pH 5–7 (1) ignore colours [1]

(b) **(i)** white (1) precipitate (1) dissolves owtte (1) [3]

(ii) white (1) precipitate (1) dissolves owttte (1) [3]

(c) no reaction/no change/no precipitate/no observation (1) [1]

(d) white (1) precipitate (1) [2]

(e) litmus turns red (1) then bleached/white (1) [2]

(f) bubbles/fizz etc. (1)

glowing splint (1) glows brighter/relights (1) [3]

(g) zinc (1) sulfate (1) [2]

(h) oxygen (1) [1]

(i) transition metal present (1) catalyst (1)

manganese/copper (1) oxide (1) max 2 [2]

[Total: 40]