

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

MARK SCHEME for the May/June 2011 question paper
for the guidance of teachers

0620 CHEMISTRY

0620/51

Paper 5 (Practical), maximum raw mark 40

Mark schemes must be read in conjunction with the question papers and the report on the examination.

- Cambridge will not enter into discussions or correspondence in connection with these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2011 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

Page 2	Mark Scheme: Teachers' version	Syllabus	Paper
	IGCSE – May/June 2011	0620	51

- 1 (a) Table of results for Experiment 1
initial and final volumes and differences completed correctly (1)
to 1 decimal place (1)
comparable to Supervisor's report (1) $\pm 4 \text{ cm}^3$ [3]
- (b) Table of results for Experiment 2
initial and final volumes and differences completed correctly (1)
to 1 decimal place (1)
comparable to Supervisor's report (1) $\pm 4 \text{ cm}^3$ [3]
- (c) bubbles/fizz/effervescence (1) glowing splint (1) relights/brighter (1)
ignore reference to black [3]
- (d) oxygen/O₂ (1) [1]
- (e) (i) colourless **not** clear to pink/purple (1) **or** reverse [1]
(ii) potassium manganate is coloured/is an indicator/owtte (1) [1]
allow not an acid/alkali reaction
- (f) (i) experiment 1 (1) [1]
(ii) experiment 1 two times the volume of experiment 2 [1]
(iii) solution B/potassium manganate more concentrated/stronger (1) **or** converse
two times (1)
two times as concentrated = 2 [2]
- (g) half the value of the result for experiment 2 (1) cm^3 (1)
half the volume of C used (1) [3]
- (h) advantage easy to use/quick/convenient/fairly accurate (1)
disadvantage not accurate owtte (1) [2]

Page 3	Mark Scheme: Teachers' version	Syllabus	Paper
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- 2 (a) (i) colourless (1) smell (1) [2]
- (ii) colourless/pale yellow **and** no smell (1) [1]
- (b) (i) catches fire/ignites (1)
yellow/blue (1)
yellow flame = 2 [2]
- (ii) extinguished/no reaction/owtte (1) [1]
- (c) (i) yellow/brown/orange/red (1) solution/dissolves (1) **not** ppt. [2]
- (ii) yellow/brown/orange (1) [1]
- (iii) two layers/rings (1) pink/purple top layer (1) [2]
- (d) (i) no reaction/no change/remains clear/stays same (1) [1]
- (ii) yellow (1) precipitate (1) [2]
- (e) brown/yellow/cream/white (1)
precipitate (1) [2]
- (f) organic (1) alcohol/named alcohol/fuel (1) **allow** flammable [2]
- (g) iodide/I⁻ (1) **not** iodine [1]

[Total: 40]