

Redox

Mark Scheme

Level	IGCSE
Subject	Chemistry
Exam Board	CIE
Topic	Chemical Reactions
Sub-Topic	Redox
Paper Type	Alternative to Practical
Booklet	Mark Scheme

Time Allowed: 26 minutes

Score: /21

Percentage: /100

Question	Answer	Marks	Guidance
1	<p>step 1 add copper oxide or catalyst to hydrogen peroxide; measure volume of gas / mass loss / collect gas / count bubbles; over time; known volume of hydrogen peroxide; compare to hydrogen peroxide on its own; test gas with glowing splint; splint relights;</p> <p>step 2 filter copper(II) oxide; dry; weigh; compare to original mass;</p> <p>OR filter (copper(II) oxide) / evaporate to dryness; add to hydrogen peroxide; measure rate of reaction; compare to first experiment;</p>	max 8	

- 2 Table of results
 correct burette readings in table (3) or 17.2, 18.9, 26.5
 i.e. 16.8, 17.1 and 25.5
 Differences correctly completed (1) Difference 7.6
 i.e. 8.4
- (a) (i) Experiment 1 [4]
 (ii) twice volume/more than twice as much 11
 (iii) Solution B was 2x (1) concentration of C (1) or similar 11
 B more concentrated than C (1 only) 12
- (iv) volume A = 33.6 (1) cm³ (1)/34.4cm [3]
 2x iodine produced (1)
- (b) reference to accuracy (1) indicator (1)/easier to see [2]
not test for J_i max 2