



Rewarding Learning

ADVANCED
General Certificate of Education
2024

Chemistry

Assessment Unit A2 3

assessing

Further Practical Chemistry

Practical Booklet A

[ACH31]

THURSDAY 9 MAY, MORNING

**MARK
SCHEME**

			AVAILABLE MARKS
1	X = ethanedioic acid-2-water		
	(a) (i) white	[1]	
	(ii) mass from 1.50 to 1.60 mass to 2 decimal places unit	[2]	
	(b) (i) table with headings [1] units [1] values to 1 decimal place [1] titres correctly calculated [1] rough greater than accurates but no more than 2 cm ³ [1] accurate titres concordant ± 0.1 cm ³ [1] correct calculation of mean titre to at least 1 decimal place [1] mean titre units as cm ³ [1]	[8]	
	(ii) pink to colourless	[2]	13
2	(a) red/orange [1] pH 1–3 [1]	[2]	
	(b) bubbles/effervescence [1] solid disappears [1] colourless solution [1]	max [2]	
	(c) bubbles [1] magnesium moves [1] colourless solution [1]	max [2]	
	(d) (i) temperature with unit	[1]	
	(ii) bubbles [1] white (solid) [1] higher temperature with unit [1]	[3]	
	(e) (i) purple [1] pink/red/brown [1] colourless [1]	[3]	
	(ii) time recorded with unit	[1]	
	(iii) temperature increases, rate increases	[1]	
	(iv) rate calculated correctly with correct unit (s ⁻¹)	[2]	17
	Total		30