

Multiple Choice Answers

Q12: A

Multiple Choice Answers

Q12: B

Q13: D

Multiple Choice Answers

Q12: D

Q13: D

1(a)	0.486 g
1(b)	M1 Dissolve the solid / KSCN(s) in (the beaker) (using a small volume of) (distilled) water M2 Transfer/add to a (250 cm ³ volumetric) flask and Rinse (with distilled water) M3 Top the 250 cm ³ volumetric flask up to mark (with distilled water) and Invert the (stoppered) flask Allow '250 volumetric flask' (i.e. units need not be seen)
1(c)(i)	to avoid oxidation (of contents of flask)
1(c)(ii)	to ensure that equilibrium has been reached
1(c)(iii)	Silver / Ag
1(d)(i)	(yes) and two titres (2 and 3) are within 0.10 cm ³ (of each other)
1(d)(ii)	Working must be shown $= \frac{2 \times 0.05}{21.90} \times 100 = 0.457\%$
1(d)(iii)	percentage error (in larger titre) is lower
1(e)(i)	0.0437 mol dm ⁻³
1(e)(ii)	0.00630 mol dm ⁻³
1(e)(iii)	M1 $K_c = 0.00630 / (0.04370)^2 = 3.30$ M2 units = dm ³ mol ⁻¹
1(f)(i)	No and As temperature increases, K_c decreases
1(f)(ii)	(data points that obey a line of best fit are reliable because) there are no anomalous points.
1(f)(iii)	exothermic and As temperature increases: K_c decreases or equilibrium shifts to left