

Multiple Choice Answers

Q23: B

Q24: B

Q25: A

Multiple Choice Answers

Q25: C

Multiple Choice Answers

Q26: A

5(a)(i)	$\text{Pb}^{2+}(\text{aq}) + \text{SO}_4^{2-}(\text{aq}) \rightarrow \text{PbSO}_4(\text{s})$ M1 PbSO_4 as the ONLY formula on the right M2 ONLY Pb^{2+} and SO_4^{2-} on the left M3 state symbols
5(a)(ii)	lead(II) nitrate
5(a)(iii)	sodium sulfate / potassium sulfate / ammonium sulfate
5(a)(iv)	residue
5(a)(v)	M1 wash with distilled water M2 suitable method of drying
5(b)(i)	<i>any two from:</i> - good conductor of electricity - soluble salts - basic oxides
5(b)(ii)	<i>any two from:</i> - variable oxidation states - coloured compounds - catalyst

6(a)	alkali metals
6(b)	lithium
6(c)(i)	Any two: - solid dissolves / disappears - fizzing/ bubbles / effervescence - solid floats - solid moves (on surface)

6(c)(ii)	$2\text{Li} + 2\text{H}_2\text{O} \rightarrow 2\text{LiOH} + \text{H}_2$ M1 LiOH as product M2 correct equation
6(d)	M1 softer M2 lower density
6(e)(i)	M1 gas M2 pale yellow-green
6(e)(ii)	$\text{Cl}_2 + 2\text{Br}^- \rightarrow 2\text{Cl}^- + \text{Br}_2$ M1 Br ⁻ as a reactant and Cl ⁻ as a product M2 correct equation
6(e)(iii)	M1 energy required in breaking bonds $= 150 + 242 = (+) \mathbf{392}$ M2 energy released when bonds are formed $= 2 \times 218 = (+) \mathbf{436}$ M3 enthalpy change, ΔH $= 392 - 436 = - \mathbf{44}$