

Section A

Question	Marking guidance	Mark	AO	Comments
01.1	$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2$	1	AO1a	Allow correct numbers that are not superscripted
01.2	$\text{Ca(s)} + 2\text{H}_2\text{O(l)} \longrightarrow \text{Ca}^{2+}(\text{aq}) + 2\text{OH}^{-}(\text{aq}) + \text{H}_2(\text{g})$	1	AO2d	State symbols essential
01.3	Oxidising agent	1	AO2c	
01.4	$\text{Ca(g)} \longrightarrow \text{Ca}^{+}(\text{g}) + \text{e}^{-}$	1	AO1a	State symbols essential Allow 'e' without the negative sign
01.5	Decrease	1	AO1a	If answer to 'trend' is not 'decrease', then chemical error = 0/3
	Ions get bigger / more (energy) shells	1	AO1a	Allow atoms instead of ions
	Weaker attraction of ion to lost electron	1	AO1a	