

4(a)	energy required when one mole of gaseous atoms is formed from the element
4(b)	energy released when one mole of gaseous atoms gains one mole of electrons and becomes one mole of gaseous 1^- ions
4(c)	M1: iodine atom has greater radius M2: less attraction between nucleus and incoming electron in iodine
4(d)	M1: $\frac{1}{2}(-486 + (2 \times 364))$ M2: +121