

3(a)(i)	M1 eight crosses in second shell of Mg M2 7 dots and 1 cross in second shell of F M3 '2+' charge on Mg ion on correct answer line and '−' charge on F ion on correct answer line	3
3(a)(ii)	MgF_2	1
3(a)(iii)	melting	1
3(b)	M1 4 dot and cross single bonds M2 3 pairs of non-bonding e on each Cl and no non-bonding e on Si	2
3(c)(i)	molecule(s)	1
3(c)(ii)	M1 covalent bonds M2 strong bonds and giant (covalent) structure	2

Question	Answer	Marks