

Multiple Choice Answers

Q17: B

Multiple Choice Answers

Q16: C

Multiple Choice Answers

Q16: D

Multiple Choice Answers

Q17: A

1(a)	78(%)
1(b)	450
1(c)	3
1(d)	2
1(e)	any value between 25 to 35 inclusive
1(f)	2
1(g)	8
1(h)	7

1(a)	21
1(b)	450
1(c)	2
1(d)	8
1(e)	16
1(f)	6.02×10^{23}

4(a)	no reactants or products can enter or leave
4(b)	enthalpy change (of reaction)
4(c)	(The value of ΔH is) negative
4(d)	+105 (kJ / mol)
4(e)	decreases increases increases no change
4(f)	M1 Bond energy in breaking bonds = 1075 + 240 = (+) 1315 M2 Bond energy of COCl_2 = 1315 – (–105) = 1420 M3 C=O = 1420 – 2 $\times$ C–Cl = 1420 – (2 $\times$ 340) = (+) 740
4(g)	M1 both single bonding dot and cross pairs correct M2 double C=O bond dot and cross pairs are correct M3 Complete diagram is correct