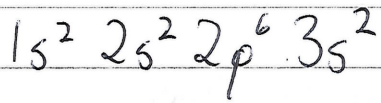
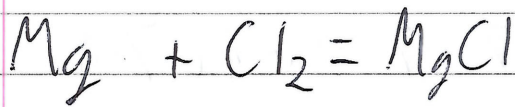
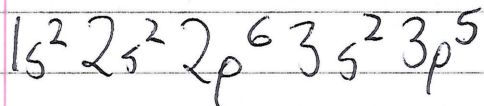


Section A

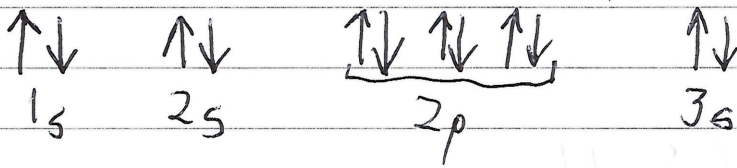
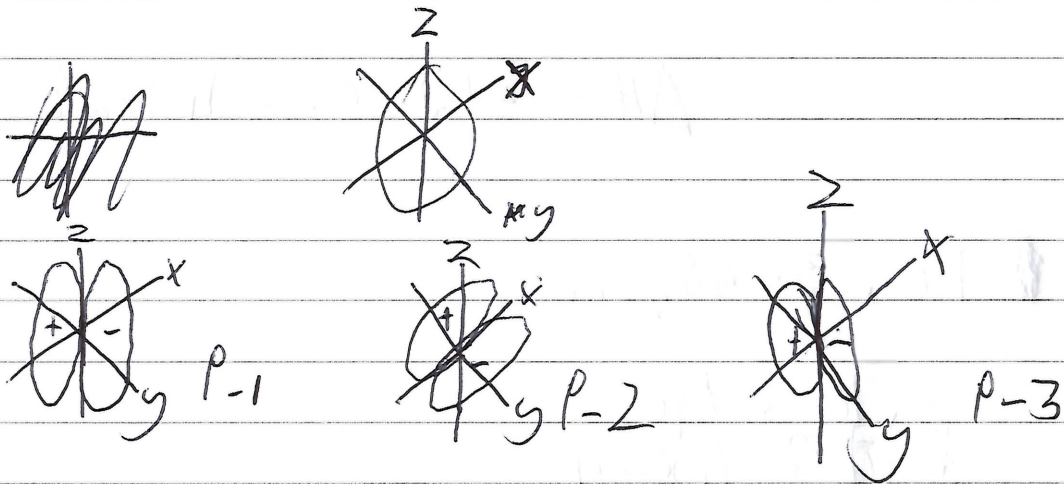
2) Mg - Valence 2, reactive Metal

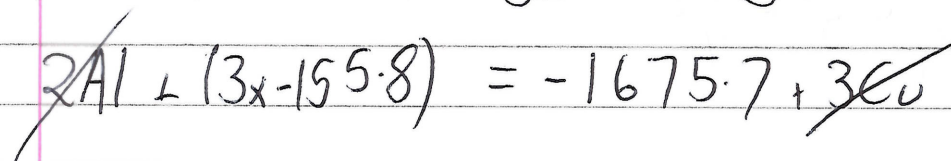
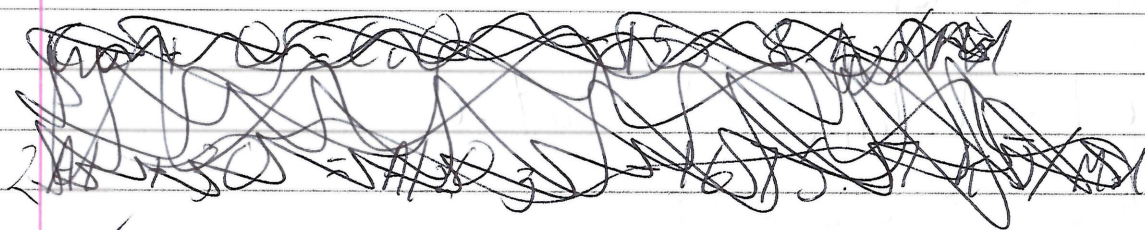


Cl - Valence -1, reactive gas



3)





$$-467.4 = -1675.7 \rightarrow -467.4$$

$$\Delta H = -1208.3 \text{ KJ/mol}$$

$$6) 16 \times 3 = 48 \text{ g/mol}$$

~~$$\frac{3 \times 16}{3 \times 16 + 106.4} \times 100$$~~

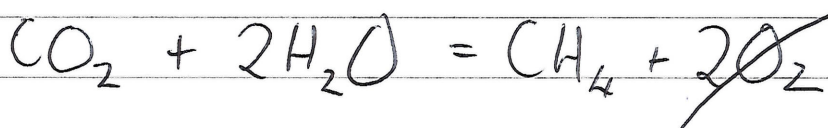
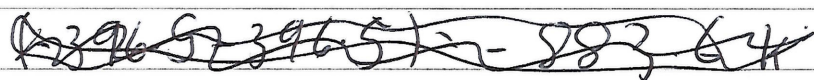
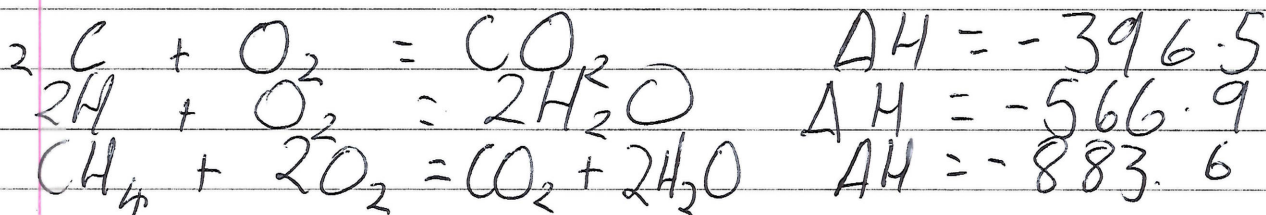
$$16 \times 3 = 48$$

$$\frac{48}{106.4} = 0.4511$$

$$22.4 \times 0.4511 = 10.105$$

Section B

3.



$$\begin{aligned} -396.5 + -566.9 &= -963.4 \\ -963.4 &= -963.4 \end{aligned}$$

$$\begin{aligned} \Delta H_f &= -883.6 - 963.4 \\ \Delta H_f &= -1847.0 \text{ kJ/mol} \end{aligned}$$

© 2006 The Authors
Journal compilation © 2006 Blackwell Publishing Ltd

[illegible]

© 2006 The Authors
Journal compilation © 2006 Blackwell Publishing Ltd

.....

[illegible]

.....

[illegible][illegible]