

- Explain the trends in electron affinities for the first 5 elements of the second row of the periodic table, in terms of their electronic configurations.

i.e. Discuss the trend in ΔH for the following reaction: $A(g) + e^- \rightarrow A^-(g)$

Element	Li	Be	B	C	N
ΔH (in kJ mol^{-1})	-60	+241	-27	-122	+8

Marks
3

- Briefly explain the following concepts and their electronic origins.

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(a) paramagnetism

(b) polar bond