

Example: Steps for Forming LiF

1) Turn solid Li into a gas

- Sublimation

2) Break the $F_2(g)$ bond to get $F(g)$

- Bond energy

3) Ionize $Li \rightarrow Li^+$

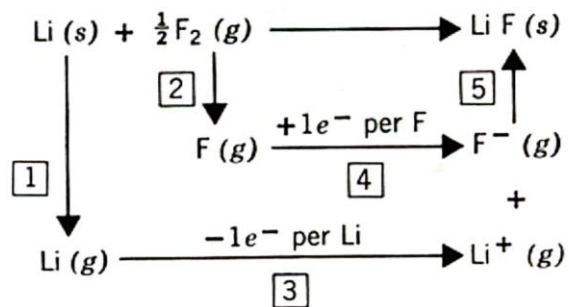
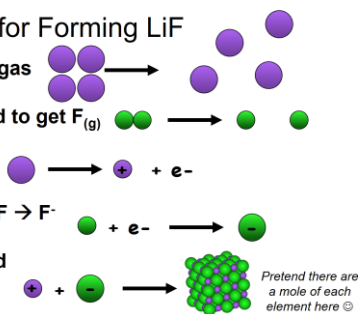
- Ionization energy

4) Add an electron to $F \rightarrow F^-$

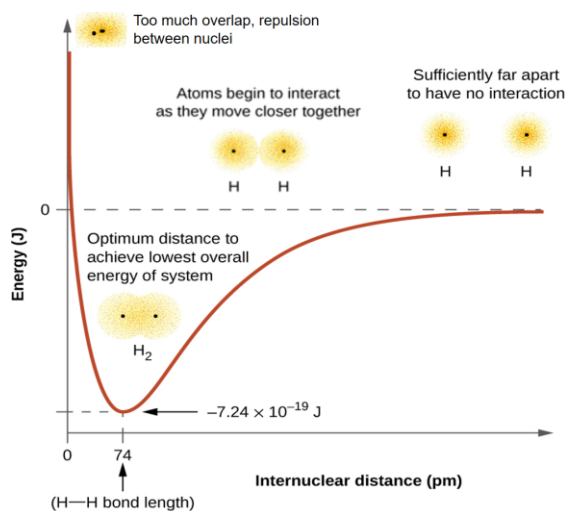
- Electron affinity

5) Form the ionic bond

- Lattice energy



Lattice Energy	-786 kJ/mol
Ionization Energy for Na	495 kJ/mol
Electron Affinity for Cl	-349 kJ/mol
Bond energy of Cl_2	239 kJ/mol
Enthalpy of sublimation for Na	109 kJ/mol



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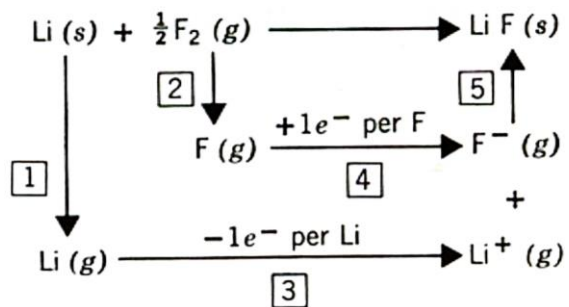
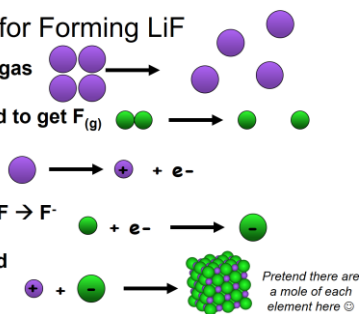
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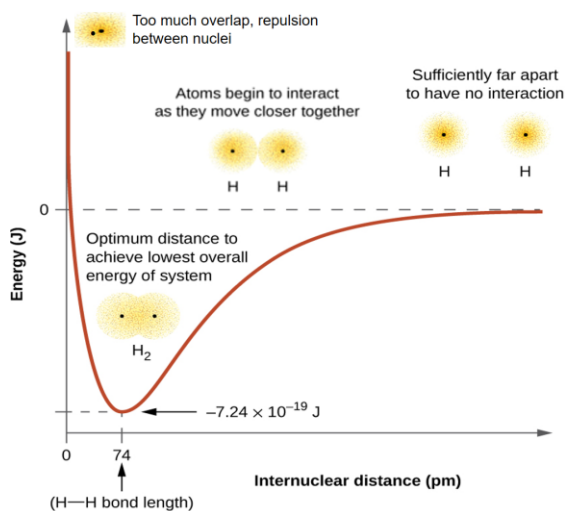
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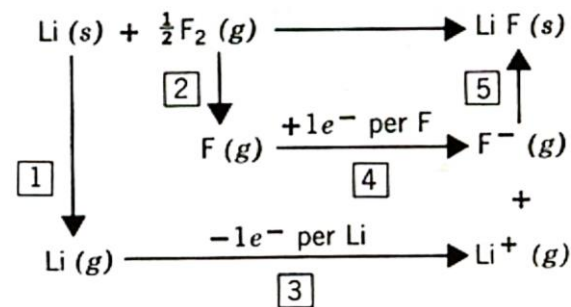
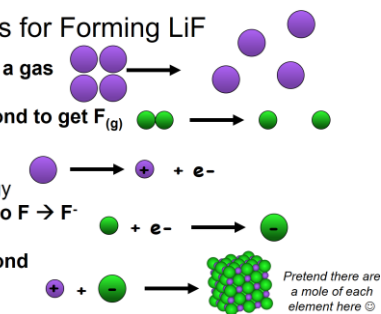
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