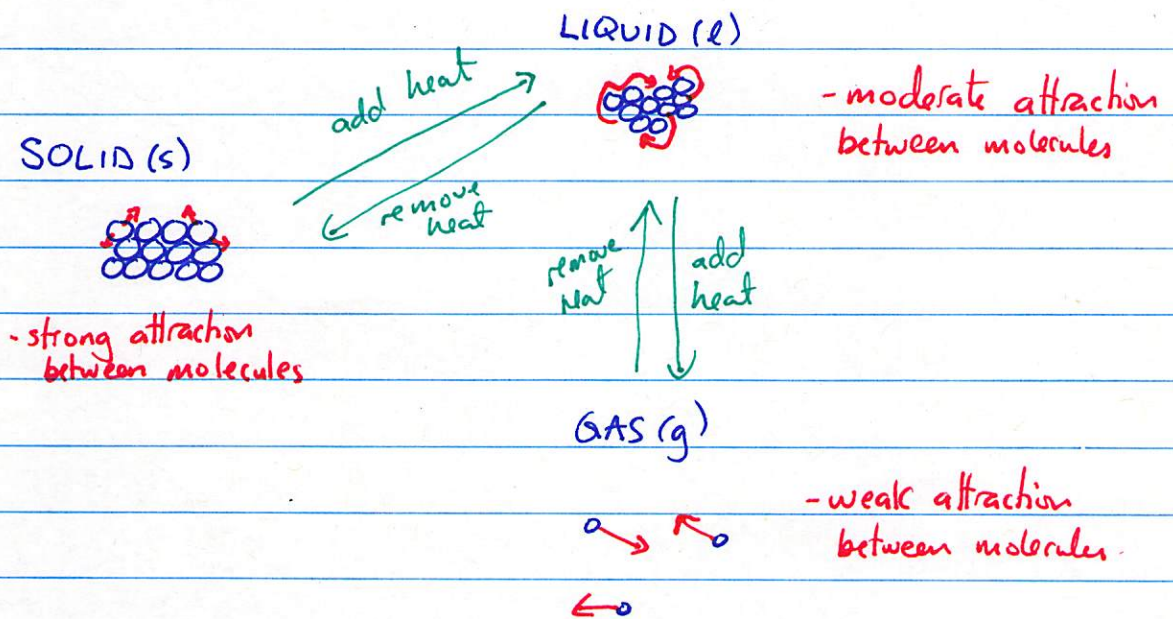


1/14/19

Ch 11: Liquids, Solids, and Intermolecular Forces. (IMF)

States of matter:

3 common:



What kinds of intermolecular forces (IMF) are there?

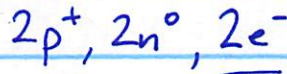
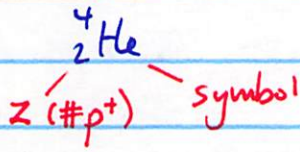
□ London Dispersion Force (LDF)

- present between all molecules

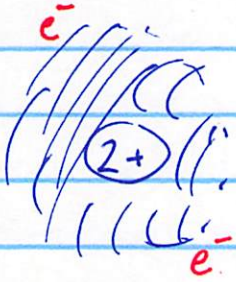
$\propto \#e^-$ (\propto molar mass)

\propto surface area (contact) between molecules.

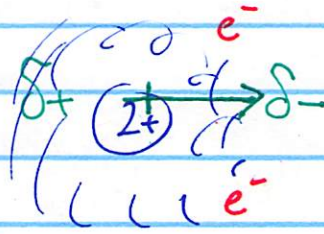
How? $A(\#p^+ + \#n^0)$



weak LDF.



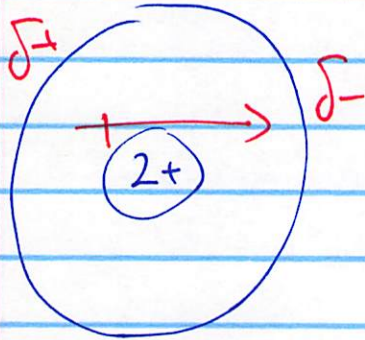
e^- s are normally on opposite sides



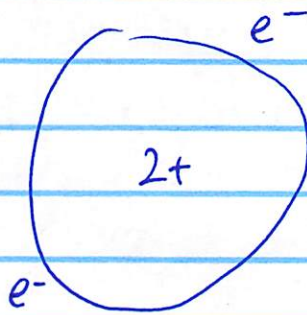
for an instant, they can find themselves on same side.

- creates an instantaneous dipole.

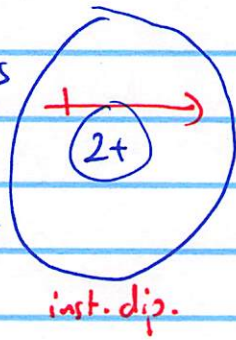
1/16/2019



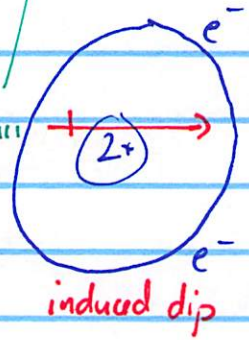
instantaneous dipole



induces dipole in adjacent He



inst. dip.



induced dip

IMF

Youtube video with LDF animation