

Attraction Between Molecules

Intermolecular forces are weaker than both ionic and covalent bonds.



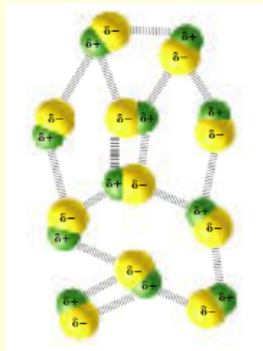
Van der Waals Forces

-Weakest attractions between molecules.

- Can be separated into two categories:

Dipole Interactions

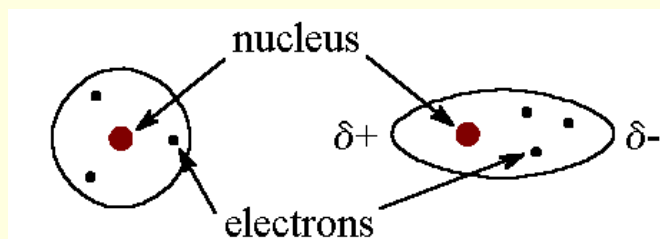
Electrical attraction between oppositely charged regions of polar molecules.



Dispersion Forces (London Dispersion Forces)

- weakest of all molecular interactions
- occur between even non-polar molecules
- caused by the motion of electrons

when moving electrons are momentarily on one side of a molecule, the electrons of the neighbouring molecule will move to the opposite side, causing a weak attraction.



van der Waals



Dipole
Interactions

Stronger
Hydrogen
Bonding

Network Solids

solids in which all of the atoms are covalently bonded to each other

- very stable substances with very high melting and boiling points

-melting requires breaking covalent bonds throughout the solid



Section 8.3 Worksheet

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