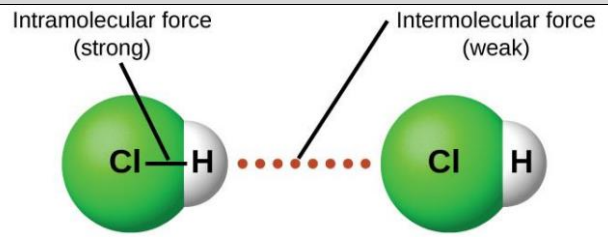
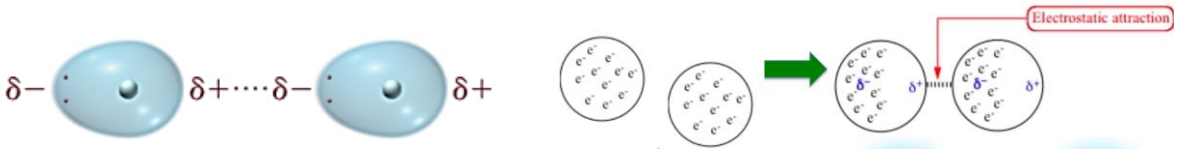
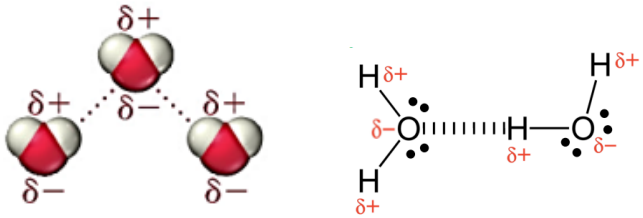
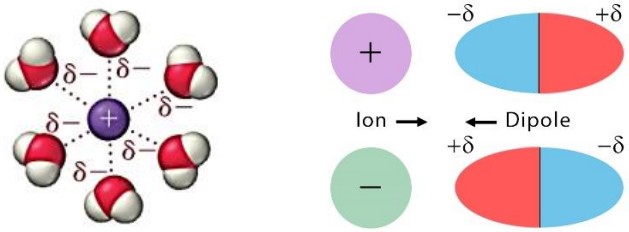
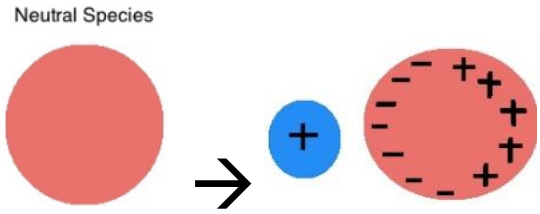
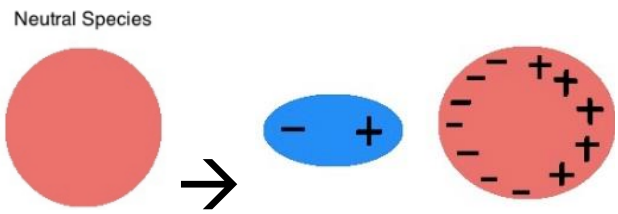
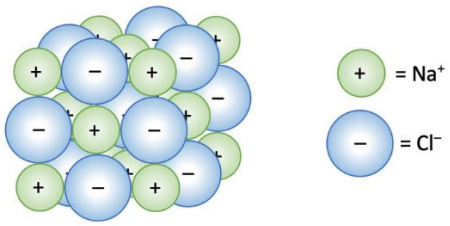
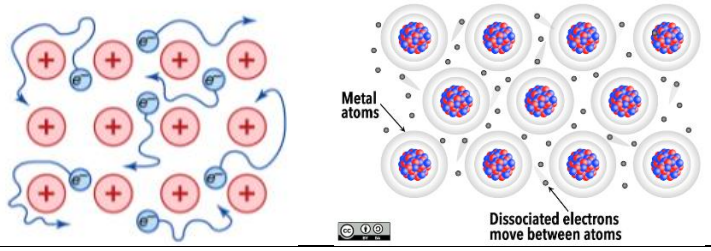
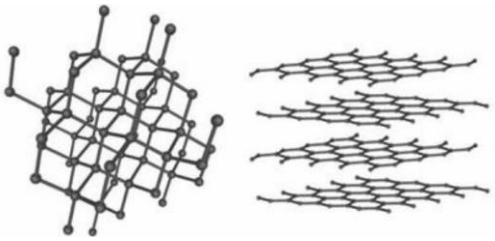
IMFs Visually

IntRA versus IntER



Intermolecular Forces

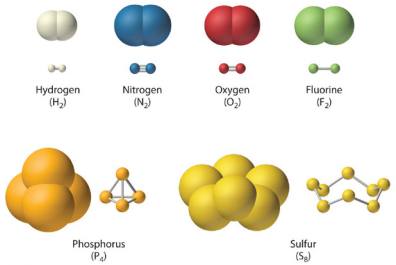
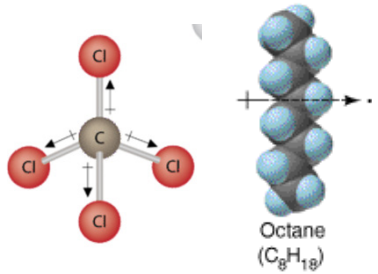
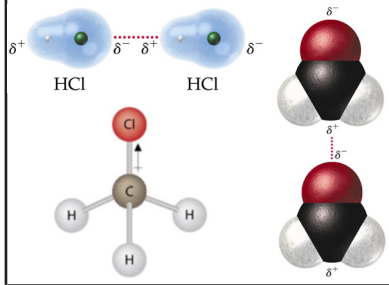
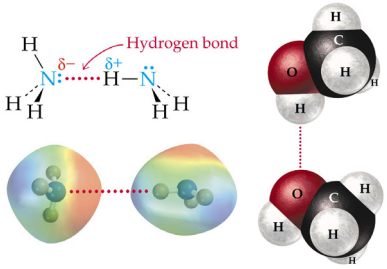
London Dispersion Force	
Dipole-Dipole	
Hydrogen Bonding	
Ion-Dipole Force	
Ion Induced Dipole	
Dipole Induced Dipole	

Bulk Solids	
Ionic Lattice	
Metallic Bond	
Network Covalent	

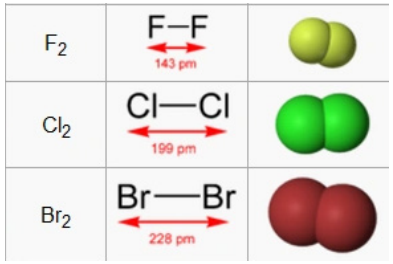
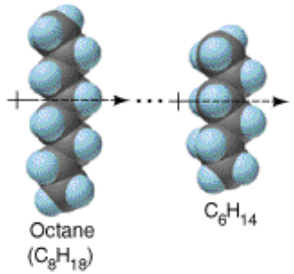
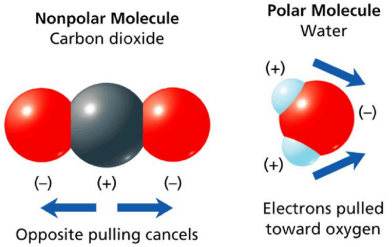
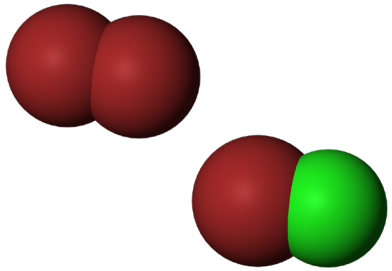
Videos About Vapor Pressure

- Explaining Boiling - https://youtu.be/Ag4lLUXKuSM
- Vapor Pressure, IMFs and Boiling Point - https://youtu.be/iZqsQhZ1CAs
- Crash Course, Partial Pressures and Vapor Pressure - https://youtu.be/JbqtqCunYzA

① Identify the type of Intermolecular Force (Van Der Waals Force)

	***Electronegativity Values***	***Covalent Bonding***	***Molecular Shape***	***Dipole***	***Intermolecular Force***
	the *same*	*non-polar* covalent **bond**	irrelevant	*temporary dipole* only	*London Dispersion* only
	*different*	*polar* covalent **bond**	*symmetrical non-polar* **molecule**	*temporary dipole* only	*London Dispersion* only
	*different*	***polar*** covalent **bond**	*asymmetrical polar* **molecule**	*permanent dipole* (& temporary)	*Dipole-Dipole* & LDF
	*very different* H—F, O, N	*polar* covalent **bond**	*asymmetrical polar* **molecule**	*permanent dipole* (& temporary)	*Hydrogen Bonding* & Dipole-Dipole & LDF

② Compare the strength of Intermolecular Forces (Van Der Waals Force)

	***Can think/write about ...***	***... but must write about ...***	***... to explain, for example, ..***	***... in terms of ...***
	'the size of the atoms' 'the number of electron shells' 'electron distance from the nucleus'	'the electron cloud is more polarisable' 'stronger temporary dipoles are formed'	that the boiling points increase as you go down a group that CCl_4 has a higher BPt than CH_4	the LDF's in ... are stronger than in ...
	'the size of the molecules' 'the mass of the molecules' 'the number of atoms'	'the electron cloud is more extensive' 'a larger number of temporary dipoles are formed'	that the boiling points increase as the chain gets longer	the LDF's in ... are stronger than in ...
	'the electronegativity values' 'the type of covalent bonds' 'the shape of the molecule'	'the bonding is polar but no permanent dipole' 'the bonding is polar and there is a permanent dipole'	that the boiling points depend on the ***type*** of intermolecular forces present	hydrogen bonding > dipole-dipole > LDF's (*in similar molecules*)
	'the electronegativity values' 'the shape of the molecule'	'bonding is non-polar / no permanent dipole' 'the bonding is polar/ permanent dipole'	that the boiling point of Br_2 (LDF) is higher than that of BrCl (dipole-dipole) (*data, not prediction*)	LDF's can be stronger than dipole-dipole and even hydrogen bonding