

Chemistry C2 Chemical Bonding Revision

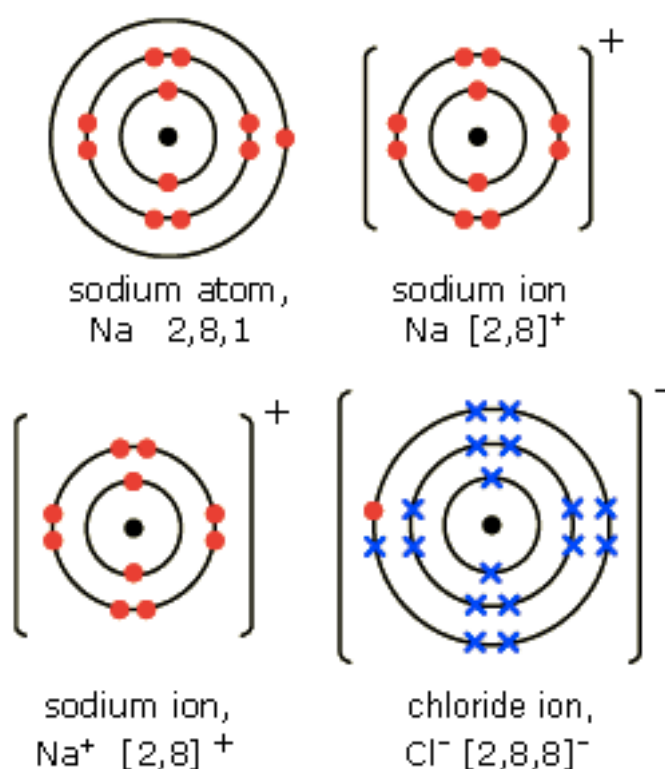
Ionic Bonding

Ions are electrically charged particles formed when atoms lose or gain electrons. So they can become stable/have eight electrons on the outer shell/having the same electronic structure as noble gases.

Metal atoms form positive ions, while non-metal atoms form negative ions.

The strong electrostatic forces of attraction between oppositely charged ions are called ionic bonds or electrovalent bonds.

Metal atoms lose electrons in their highest energy level and become positively charged ions (cations). While non-metal atoms gain electrons from another atom to become negatively charged ions (anions).



Similarities and differences between atoms and ions

	atoms	ions
Charges	No. same number of protons and electrons	Yes. + or -
number of electrons compare to protons	same	different

Covalent Bond

Covalent bond is formed when two non-metals react together sharing electrons to complete full outer shells. The bonded atoms form molecules.

The number of covalent bonds is equal to eight minus the group number

