

Chemical bonds between atoms

Definition - A Chemical bond between atoms is a lasting attraction between atoms, ions or molecules that creates a chemical compound

Bonds happen because Atoms want to be stable, and by stable it means that they want a full outer shell, be it 2 or 8

Ionic Bonding

Ionic bonding is the type of bond for a chemical bond between a non-metal and a metal.

Ions are formed by electron loss or gain, depending on what type of atom it is. The attraction between the positive or negative due to the electron gain or loss is the bond.

There are 2 types of ions, Anions and Cations.

The groups 1-3 of the periodic tables are mostly metals, which then lose their outer shell electron to have a fuller inner shell. These are now Cations that are positively charged.

Since they gave away electrons they have more protons to electrons, this causes them to have an overall positive charge

These electrons are gained by the non metals in group 5-7, to become Anions