



IONIC BOND

The electrostatic attraction between
Positive Ions &
Negative Ions

Property: High Melting/Boiling pt

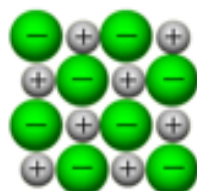
Many strong bonds in Lattice
Takes lots of energy to break them all

Property: Electrical Conductor

Conduct as solution or liquid
Ions can move

Property: Electrical Insulator

Can't conduct as solid
Ions can't move

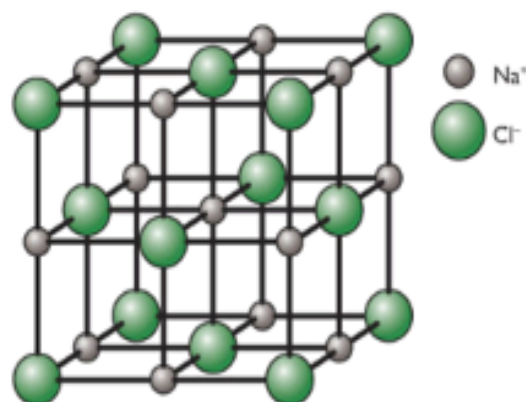


Empirical Formula

Count + & - ions
8 : 8 ratio
1:1
eg NaCl

Structure & Bonding

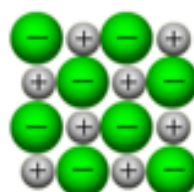
IONIC SUBSTANCES



Ball & Stick Model Lattice

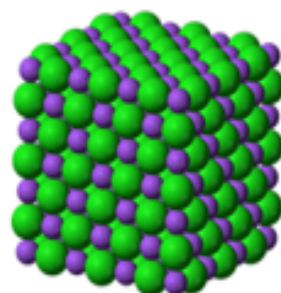
Problems:

1. Ions don't touch
2. Sticks are actually forces



Better 2D MODEL

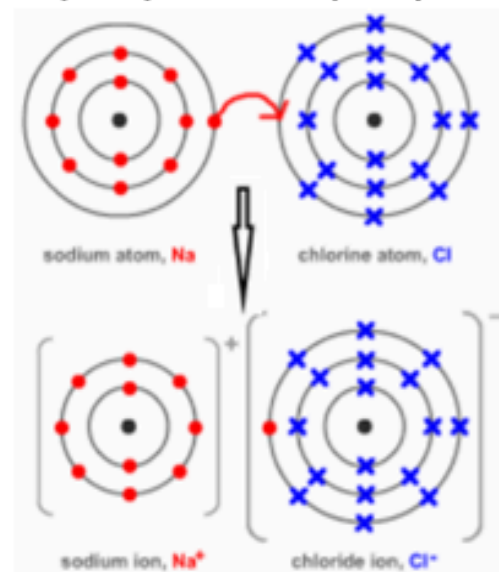
Better 3D MODEL



#1 – Sodium Chloride

^{11}Na
(2.8.1)

^{17}Cl
(2.8.7)



#2 – Magnesium Fluoride

^{12}Mg
(2.8.2)

^9F
(2.7)

