



Ionic Bonding!

2

Simple Covalent Compounds

Two or more non-metals!

A metal and a non-metal!

2

Simple Covalent Compounds

Sharing of electrons!

Transfer of electrons, from metal to non-metal!

Compounds

2

Simple covalent molecules!

Ionic lattice of metal cations and non-metal anions!

Compounds

2

Strong covalent bonds, but...

N

Compounds

...weak intermolecular (van der Waals) forces of attraction!

Strong electrostatic force of attraction!

Compounds

2

Low melting points and boiling points!

High melting points and boiling points!

Compounds

2

Insoluble in polar solvents!

Soluble in polar solvents!

2

Simple Covalent Compounds

Except for H⁺(aq), do not conduct electricity in any state! Conduct electricity when either molten or aqueous!

Compounds

2

Relatively soft!

Hard and brittle!

2

Simple Covalent Compounds

Stable noble gas electronic configuration!

Yes! Finally we agree!

Compounds

2



I like Biology and Physics!

How dare you!

2

Simple Covalent Compounds

I like Biology and Physics!

There's only Chemistry!

2

Simple Covalent Compounds

