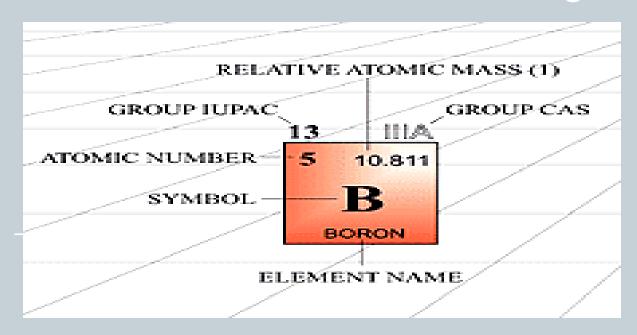
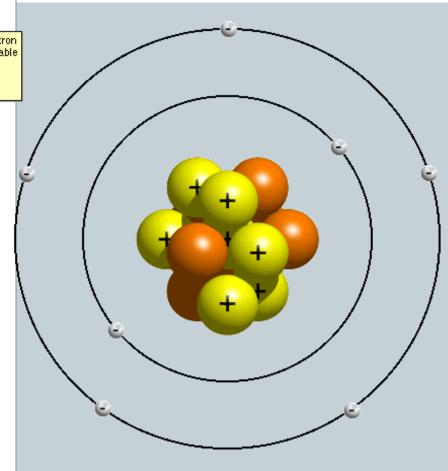
Atomic Mass

- The sum of the Protons and Neutrons in the nucleus.
- Also called Atomic Weight
- Protons+Neutrons = Atomic Weight



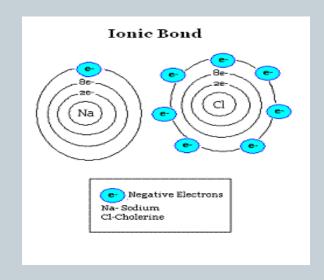
Electrons



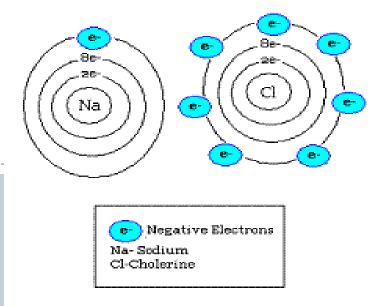
- Located outside the nucleus of the atom
- Housed in Electrical Clouds, Shells, Orbits
- Has a negative charge
- Does not have an amu because of tiny size
- Moves around the nucleus in an orbit

Electron Arrangement ctd.

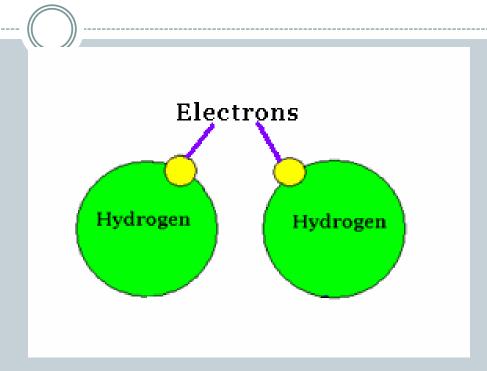
- The electrons in the outermost shell (if it is not completely full) are available for bonding
- These electrons are called Valence Electrons
- Bonding is the chemical combining of 2 or more atoms.



Ionic Bond



Ionic – Gain or Lose Electrons



Covalent-Share Electrons

Covalent Bonding

COVALENT BONDING O = O H - H

н =

AMONIA

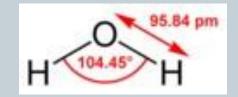
$$H-C$$
 $C-H=>C_2H_2$

ACITYLINE

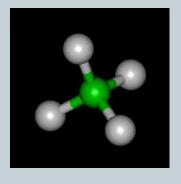
Common Coyalent Bonds

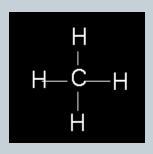
• H₂O Water



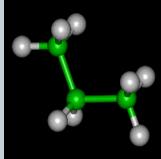


• CH₄ Methane





• C₃H₈ Propane



Ionic Equilibrium

Sulphuric acid- H_2SO_4 H_2CO_3 $HCl + NaOH = NaCl + H_2O$

 $Mg(OH)_2+H_2SO_4=Mg(HSO_4)_2 + H_2O$ $Ca(OH)_2,Mg(OH)_2,Na_2CO_3,CaO,NaOH$

Base

 $\begin{aligned} &\text{NaOH} + \text{H}_2\text{SO}_{4=}\text{Na}_2\text{SO}_4 + \text{H}_2\text{O} \\ &\text{CaO} + \text{HCL=}\text{CaCl}_2 + \text{H}_2\text{O} \end{aligned}$

Alkhali

 $\rm NH4OH + HCl = NH_4Cl + H_2O$