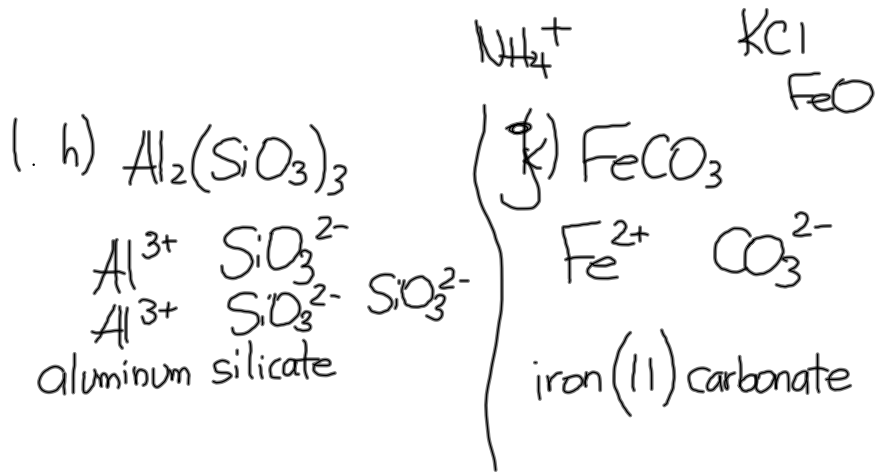


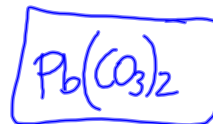
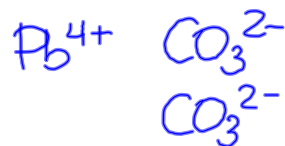
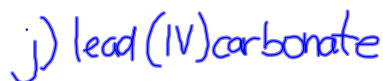
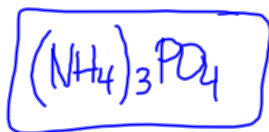
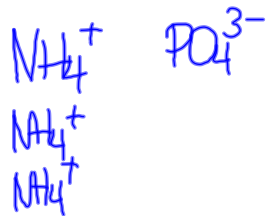


Quiz - Tomorrow

Check Worksheet



ammonium dihydrogen phosphate



Ionic Hydrates

IONIC HYDRATES - are ionic compounds that have one or more water molecules loosely attached.

Hydrates are named by

[a] stating the name of the ionic compound

[b] following this with hydrate to which the prefix for the number of waters has been added.

Ex. $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}_{(s)}$



Sodium carbonate decahydrate
or
Sodium carbonate - 10-water

Molecular Compounds

MOLECULAR THEORY - ~~nonmetal atoms~~ share electrons in a **covalent bond** to attain a maximum number of valence electrons (complete outer shell) rather than gaining electrons from metal atoms.

Ex. CO_2

Molecular elements - although the chemical formula of metals are frequently shown alone as a single atom (Na), nonmetals frequently form **diatomic molecules**.

Ex. H_2 , N_2 , O_2 , F_2 , Cl_2 , Br_2 , I_2

Br HONClIF

Also: O_3 , P_4 , S_8

Naming *Binary molecular compounds*

As outlined by IUPAC rules, some molecular compounds signify the number of atoms in the molecular formula by using the same prefixes as hydrates.

Ex. CS_2

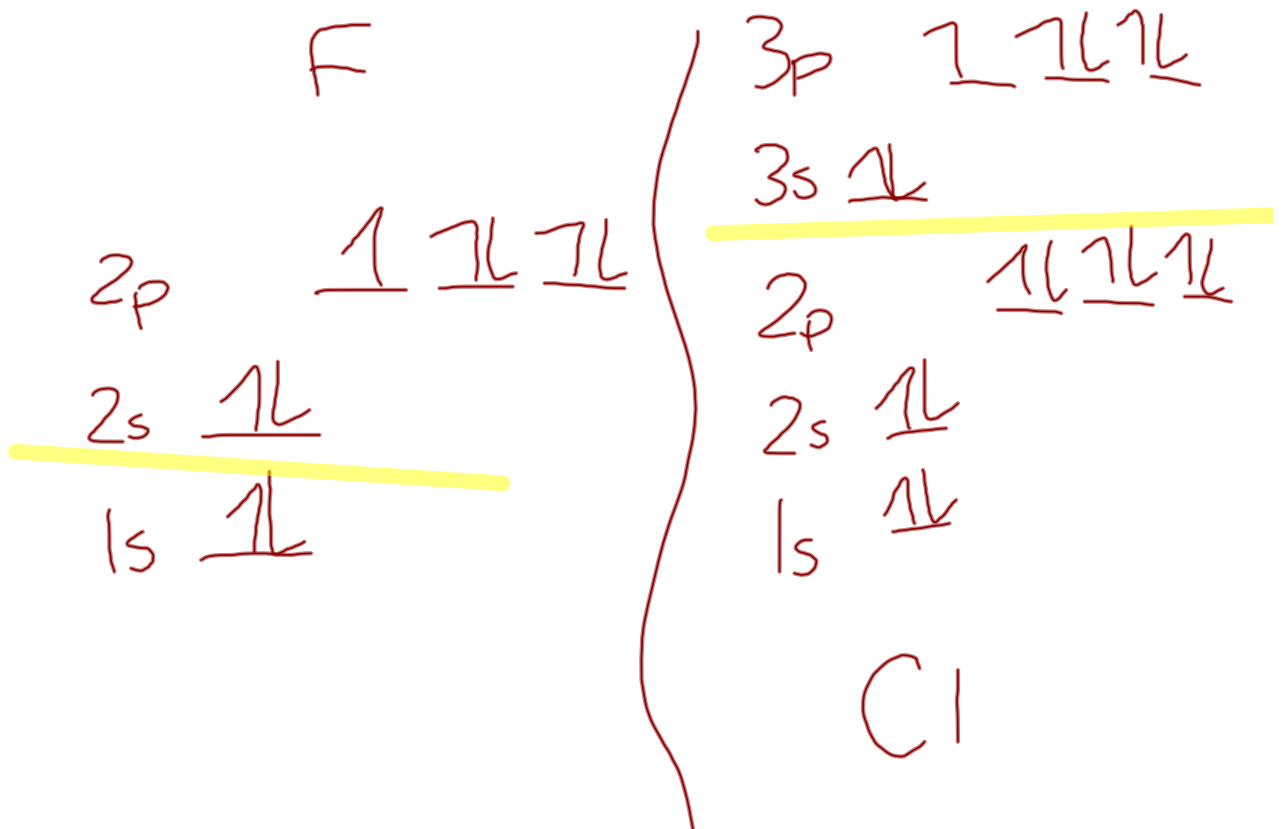
Carbon disulfide

N_2O

dinitrogen monoxide

The prefix system is usually not used for hydrogen molecular compounds

Ex. water - H_2O



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