Binary Covalent Compounds

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1:29 PM

- 2 non-metal elements joined by covalent bonds
- 2nd element ending changes to "ide"
- use prefixes to give # of atoms

1 → mono	4 → tetra	7 → hepta
2 → di	5 → penta	8 → octa
3 → tri	6 → hexa	9 → nona
		10 → deca

Naming:

ex. SO_2 → sulfur dioxide

don't write 'mono'

ex. CO → carbon monoxide

ex. P_2S_3 → diphosphorus trisulfide

ex. N_2O_3 → dinitrogen trioxide

Formulas:

ex. carbon disulfide

$C + S_2 \rightarrow CS_2$

ex. carbon tetrachloride

$C + Cl_4 \rightarrow CCl_4$

ex. tetraphosphorus decaoxide

$P_4 + O_{10} \rightarrow P_4O_{10}$

do not reduce!!