Naming Covalent Compounds

We use the _____naming system for_____. The prefix naming system tells us how many of each atom is combined in the formula.

Prefix	Number of Atoms
	1
	2
	3
	4
	5
	6
	7
	8
	9
	10

Rules to follow:

1. _____element is written first.

2. Prefix is placed _____ the element's name.

3. If there is only 1 of the first element, we do _____write the mono.
Eg. CO, simply write carbon…

4. Write the name of the second element with the appropriate prefix that shows _____ _____are present in that compound.
Eg. CO becomes carbon monoxide

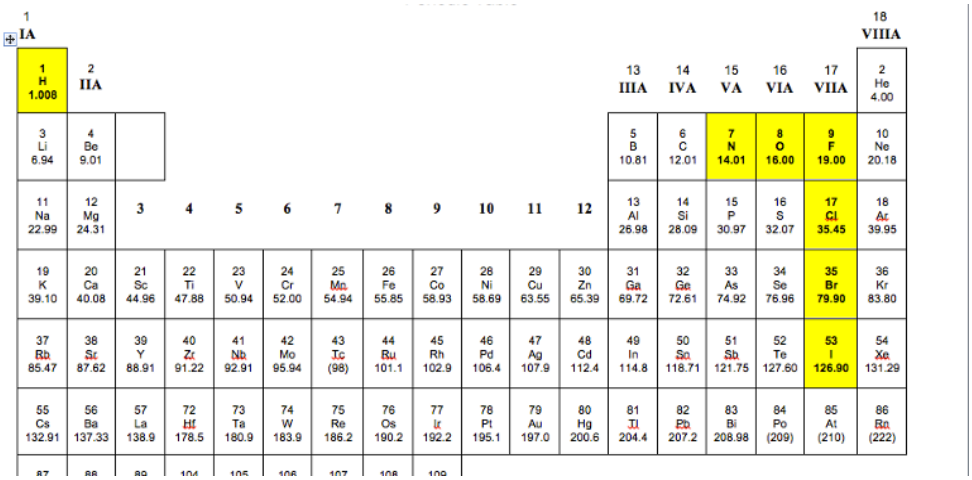
Other examples:
CS_2 = carbon disulphide
SO_3= Sulphur trioxide
CCl_4= Carbon tetrachloride
P_2O_5= Diphosphorus pentoxide

Diatoms

All elemental gases form diatomic molecules. Diatomic molecules are composed of only _____ atoms.

Hydrogen (H_2), Nitrogen (N_2), Oxygen (O_2), Fluorine (F_2), Chlorine (Cl_2), Bromine (Br_2) and Iodine (I_2)

These molecules are _____found as a single atom, all by itself.



1 IA												13 IIIA	14 IVA	15 VA	16 VIA	17 VIIA	18 VIIIA
1 H 1.008	2 IIA																2 He 4.00
3 Li 6.94	4 Be 9.01											5 B 10.81	6 C 12.01	7 N 14.01	8 O 16.00	9 F 19.00	10 Ne 20.18
11 Na 22.99	12 Mg 24.31	3	4	5	6	7	8	9	10	11	12	13 Al 26.98	14 Si 28.09	15 P 30.97	16 S 32.07	17 Cl 35.45	18 Ar 39.95
19 K 39.10	20 Ca 40.08	21 Sc 44.96	22 Ti 47.88	23 V 50.94	24 Cr 52.00	25 Mn 54.94	26 Fe 55.85	27 Co 58.93	28 Ni 58.69	29 Cu 63.55	30 Zn 65.39	31 Ga 69.72	32 Ge 72.61	33 As 74.92	34 Se 76.96	35 Br 79.90	36 Kr 83.80
37 Rb 85.47	38 Sr 87.62	39 Y 88.91	40 Zr 91.22	41 Nb 92.91	42 Mo 95.94	43 Tc (98)	44 Ru 101.1	45 Rh 102.9	46 Pd 106.4	47 Ag 107.9	48 Cd 112.4	49 In 114.8	50 Sn 118.71	51 Sb 121.75	52 Te 127.60	53 I 126.90	54 Xe 131.29
55 Cs 132.91	56 Ba 137.33	57 La 138.9	72 Hf 178.5	73 Ta 180.9	74 W 183.9	75 Re 186.2	76 Os 190.2	77 Ir 192.2	78 Pt 195.1	79 Au 197.0	80 Hg 200.6	81 Tl 204.4	82 Pb 207.2	83 Bi 208.98	84 Po (209)	85 At (210)	86 Rn (222)

Check for Understanding

1. Sulphur dioxide
2. Carbon monoxide
3. Barium hexasulphide
4. Tetrasulphur dinitride

5. PCl_5
6. Si_2I_6
7. Br_3O_8
8. MnF_2