

Compounds HW #3 Molecular Compounds name: **ANSWERS**

Molecular compounds are made when two or more non metals come together and share electrons to bond into a new compound. Metal atoms or cations do not make molecular compounds, only non-metals do this.

To name these compounds we use the prefix method, in our class we need to name/recognize up to ten atoms of any one kind, which means we need to know how to "count" to ten in "prefixes". Write the prefixes for one to ten in the boxes below. The first box is done as an example.

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

The rules to naming molecular compounds are summed up using three common substances. Their formulas are:



On the left, name the compounds using the prefix method. On the right side write the chemical formula for the named compounds

N ₂ O ₅	dinitrogen pentoxide	Hydrogen mono iodide	HI
SO ₃	sulfur trioxide	silicon difluoride	SiF ₂
PCl ₃	phosphorous trichloride	dinitrogen monoxide	N ₂ O
NF ₄	nitrogen tetrafluoride	fluorine monobromide	FBr
PBr ₃	phosphorous tribromide	arsenic trichloride	AsCl ₃
CCl ₄	carbon tetrachloride	sulfur dioxide	SO ₂
H ₂ S	dihydrogen monosulfide	phosphorous pentabromide	PBr ₅