

# Molecular Compounds

# Naming Molecular Compounds & Writing Names from Formulas

1. Both elements are nonmetals.
2. Use prefixes to indicate how many atoms are present
3. Naming the first element: prefix with its full name;  
**Do not use “mono” when naming the first element**
4. Name the second element: always use a prefix, then element name, and change the ending to -ide

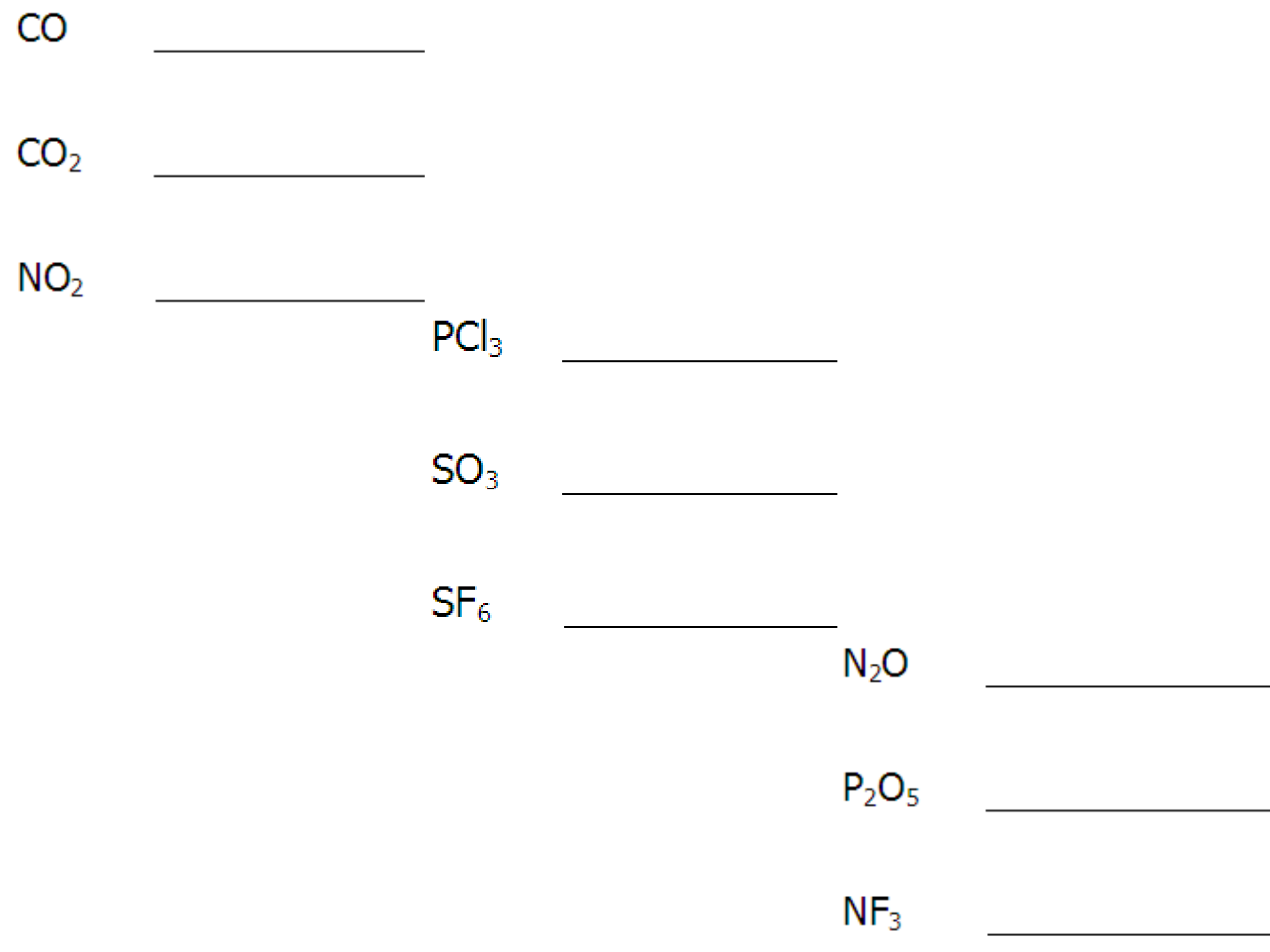
Example:  $\text{CS}_2$

Elements: carbon & 2 sulfur

Name: carbon *disulfide*

Prefixes:

1: <b>mono</b>	2: <b>di</b>	3: <b>tri</b>	4: <b>tetra</b>	5: <b>penta</b>
6: <b>hexa</b>	7: <b>hepta</b>	8: <b>octa</b>	9: <b>nano</b>	10: <b>deca</b>



# Diatomic Molecules

These atoms cannot exist as single atoms in nature

- seven in the shape of  $H_2$   $N_2$   $O_2$   
 $F_2$   $Cl_2$   $Br_2$   $I_2$
- The names don't follow the rules
- $H_2$ = Hydrogen not dihydrogen
- $N_2$ = Nitrogen not dinitrogen

# Writing Formulas from Names

1. Identify the elements
2. Identify prefixes for each element
3. Charges do not matter for molecular formulas!!

diphosphorous monosulfide

sulfur tetrafluoride

nitrogen monoxide

carbon monoxide

nitrogen triiodide

phosphorous hexabromide

diphosphorous trioxide

carbon tetrabromide

dichlorine heptoxide

# Molecular Worksheet

- Molecular Worksheet
- Memorize the 17 most common polyatomic ions listed on pg 858- use your flash cards!
- Problems- 7.1 Molecular naming: Pg. 231 #4a-e; pg 235 #2; pg 251 #10, 11