

Naming MOLECULAR compounds:

Different Rules!



FORMULA to NAME

dihydrogen monoxide

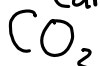
1) Name the first atom in the compound. If more than one atom is present, use the prefix before the atom's name

DON'T USE THE PREFIX MONO- AS THE PREFIX FOR THE **FIRST ELEMENT**

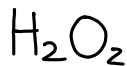
2) Name the second element with the **ide** suffix. If one atom is present then use mono-. If more than one atom is present, use the right prefix.



Carbon monoxide



Carbon dioxide



dihydrogen dioxide

Prefixes are used to indicate the number of atoms in the molecule (and its formula...)

1=mono

2=di

3=tri

4=tetra

5=penta

6=hexa

7=hepta

8=octa

9=nona

10=deca

FORMULA	NAME
CO	carbon monoxide
N ₂ O	dinitrogen monoxide
SO ₃	sulfur trioxide
PCl ₅	phosphorous pentachloride
SF ₆	sulfur hexafluoride

FORMULA	NAME
BrCl ₃	bromine trichloride
BN	boron mononitride
N ₂ O ₃	dinitrogen trioxide
SF ₆	sulfur hexafluoride
XeF ₄	xenon tetrafluoride

One of the few things you need to memorize for chemistry:

Compounds that exist as **homonuclear diatomic molecules**

Oxygen $O_2(g)$ $HNOH_2$

Halogens (group 17)
 F_2, Cl_2, Br_2

Nitrogen N_2

Oxygen O_2

Hydrogen H_2