

GENERAL CHEMISTRY STANDARD 6.5

6.5: Name molecular compounds from given chemical formulas

Naming Molecular Compounds

- For molecular (covalent) compounds with two nonmetals, indicate the number of atoms of each element with a Greek prefix before the element name and change the second element's name ending to *-ide*.

# of Atoms	Greek Prefix	# of Atoms	Greek Prefix
1	mono (omitted from first element)	6	hexa
2	di	7	hepta
3	tri	8	octa
4	tetra	9	nona
5	penta	10	deca

Naming Molecular Compounds

- For the *First Element: Greek prefix (not mono) + element name*
- For the *Second Element: Greek prefix + element name stem + “-ide”*
 - $\text{P}_2\text{O}_5 \rightarrow$ Diphosphorus Pentaoxide
 - $\text{SF}_6 \rightarrow$ Sulfur Hexafluoride
 - $\text{CO} \rightarrow$ Carbon Monoxide
 - $\text{CO}_2 \rightarrow$ Carbon Dioxide