

TABLE 3 Numerical Prefixes

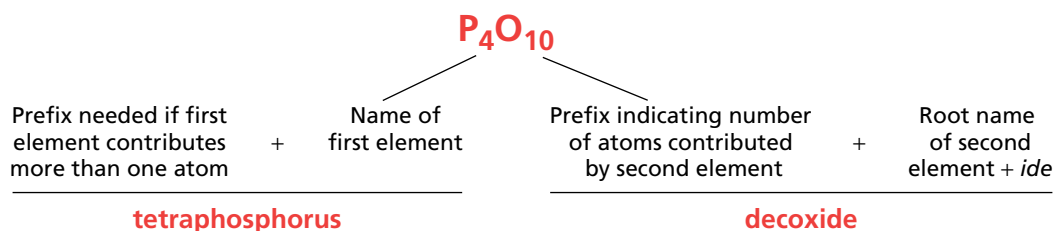
Number	Prefix
1	mono-
2	di-
3	tri-
4	tetra-
5	penta-
6	hexa-
7	hepta-
8	octa-
9	nona-
10	deca-

In these names, the prefix *mon-* (from *mono-*) indicates one oxygen atom, and the prefix *di-* indicates two oxygen atoms. The prefixes used to specify the number of atoms in a molecule are listed in **Table 3**.

The rules for the prefix system of nomenclature of binary molecular compounds are as follows.

1. The element that has the smaller group number is usually given first. If both elements are in the same group, the element whose period number is greater is given first. The element is given a prefix only if it contributes more than one atom to a molecule of the compound.
2. The second element is named by combining (a) a prefix indicating the number of atoms contributed by the element, (b) the root of the name of the element, and (c) the ending *-ide*. With few exceptions, the ending *-ide* indicates that a compound contains only two elements.
3. The *o* or *a* at the end of a prefix is usually dropped when the word following the prefix begins with another vowel. For example, one would write *monoxide* and *pentoxide* instead of *mono-oxide* and *penta-oxide*.

The prefix system is illustrated below.



In general, the order of nonmetals in binary compound names and formulas is C, P, N, H, S, I, Br, Cl, O, and F.