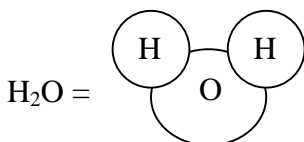


Chemical Formulas

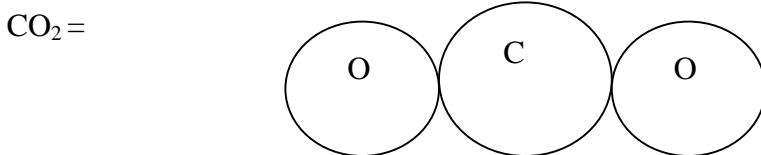
Formulas show the makeup of a compound: how many atoms of each type are bonded together. When atoms bond together, regardless of whether they are those of elements or compounds, we call them molecules

- For water:



Notice that the number applies to the symbol *to the left* of the number. We have drawn one molecule of water.

- For carbon dioxide



Notice that the "2" does *not* apply to the carbon.

More examples:

Formula	Number of Atoms in each Molecule
$BeCO_3$	Be: 1 C: 1 O: 3
$Al(NO_3)_3$	Al : 1 N: $1 \times 3 = 3$ O: $3 \times 3 = 9$
$(NH_4)_2S$	N: 2 H: $4 \times 2 = 8$ S: 1

Also notice that for in a single molecule of ammonium sulfide, $[(NH_4)_2S]$, there are 11 atoms in all, of three different types.