

FORMULA WRITING AND CHARGE BALANCE

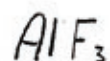
The oxidation numbers are used to write the chemical formula for compounds. In the chemical formula, symbols for the elements are used to represent the composition of the compound. Remember that compounds are NEUTRAL; this means that they have ZERO charge. (In a compound, the amount of positive charge equals the amount of negative charge).

ZERO SUM RULE: the sum of the positive and negative numbers of the elements in a compound must be zero.

Ex.1 Write the formula for the compound in which Al^{3+} combines with F^- .



$$\underline{1} (3+) + \underline{3} (1-) = 0$$



Note: the ion which has a positive O.N. is written first in a chemical formula.

Ex.2 Write the formula for the compound in which K^+ combines with O^{2-} .

Note: Always use the Zero Sum Rule.

Ex.3 Pb^{2+} and OH^-

Ex.4 Cu^+ and CrO_4^{2-}

Ex.5 Fe^{2+} and $C_2O_4^{2-}$