

Naming and Writing Chemical Formulas for Ionic Compounds

IUPAC

- International Union of Pure and Applied Chemistry
 - This worldwide organization is the governing body that oversees – among many other tasks – the formal naming of chemical compounds (nomenclature)

Naming Ionic Compounds

- Write the name of the cation
- Write the name of the anion replacing the end of the name with “ide”
- Examples
 - NaCl
 - Sodium chloride
 - MgO₂
 - Magnesium oxide

- If the anion is a polyatomic ion (ion with more than one element), sometimes called complex ions or radicals then you simply write the name of the polyatomic ion
- Examples
 - NaOH
 - Sodium hydroxide
 - H₂SO₄
 - Hydrogen sulfate
 - NaHCO₃
 - Sodium bicarbonate

Writing Formulas for Ionic Compounds

- Write the formula for the cation
- Write the formula for the anion
- Determine the number of each ion needed such that the total charge equals zero
- Write the number of each ion needed as a subscript after the ion