

1. When naming binary ionic compounds, write the name of the positive ion (cation) first, followed by the name of the negative ion (anion) with the name ending in "-ide." Example:



MgS Magnesium sulfide

- 2. Polyatomic ions (Table E) are groups of atoms with an overall charge. NO_3^{1-} , NH_4^{1+} , SO_4^{2-} , etc.
- 3. When naming compounds containing polyatomic ions, keep the name of the polyatomic ion the same as it is written in Table E.

Example:

NH₄CI

NH₄NO₃

Ammonium nitrate

Ammonium chloride

4. Chemical formulas are written so that the charges of cations and anions neutralize one another.

Example: calcium phosphate: $Ca^{2+} PO_4^{3-} = Ca_3(PO_4)_2$

5. The gram formula mass of a substance is the sum of the atomic masses of all of

the atoms in it. $H_2SO_4 = 98 \text{ g/mole}$ $2 \times H = 2 \times 1 \text{ g/mole} = 2 \text{ g/mole}$ $1 \times S = 1 \times 32 \text{ g/mole} = 32 \text{ g/mole}$ - sum = 98 g/mole $4 \times O = 4 \times 16 \text{ g/mole} = 64 \text{ g/mole}$

6. Know how to calculate the percentage composition of a compound. (Formula is on Table T.)

USE THE REFERENCE TABLES!!!