

Completion

Complete each sentence or statement.

- An electron that occupies the outermost energy level of an atom is known as a(n) Valence electron.
- An atom or group of atoms that has an electrical charge because it has either lost or gained one or more electrons is a(n) ion.
- An ion that has a negative charge is a(n) anion.
- The ion formed by an atom of a metal is a(n) cation.
- The ion formed by an atom of a nonmetal element is a(n) anion.
- A compound resulting from the formation of an ionic bond between a cation and an anion is a(n) salt.
- A repetitive geometric arrangement of ions, atoms, or molecules that forms a crystal structure is called the crystal lattice.
- The name of the ion O^{2-} is the oxide ion.
- The name of the ion Cu^+ is the copper(I) ion.
- The chemical formula for the compound strontium sulfide, which contains Sr^{2+} and S^{2-} ions, is SrS .

Word Bank:

Valence ion	Crystal lattice Salt	Cation Oxide	Anion Anion	Copper(I) SrS
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Write the formula for the following ionic compounds:

- Sodium chloride: $NaCl$
- Calcium oxide: CaO
- Iron (II) fluoride: FeF_2
- Copper (I) oxide: Cu_2O
- Aluminum sulfate: $Al_2(SO_4)_3$
- Silver chloride: $AgCl$
- Potassium carbonate: K_2CO_3
- Tin (IV) fluoride: SnF_4
- Chromium (III) oxide: Cr_2O_3
- Sodium sulfide: Na_2S

Write the names for the following ionic compounds:

- $NaNO_3$ Sodium Nitrate
- Li_2O lithium oxide
- $CuCO_3$ Copper(II) carbonate
- Fe_2O_3 Iron(III) oxide
- $Ca_3(PO_4)_2$ calcium phosphate
- SnO tin(II) oxide
- $MgCO_3$ magnesium carbonate
- $MnCO_3$ manganese(II) carbonate
- Ag_2O silver oxide
- $TiCl_3$ titanium(III) chloride