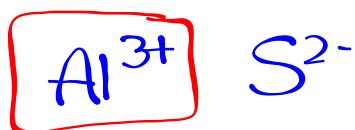


Type I Binary Ionic Compounds



strontium chloride

aluminum sulfide



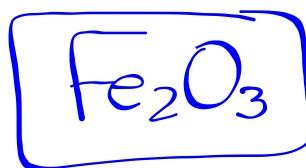
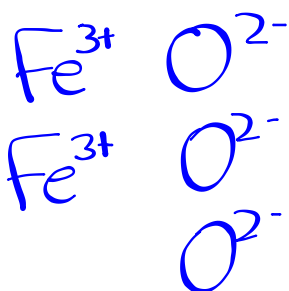
Type II Binary Ionic Compounds

Multivalent ion - some atoms (transition elements) can form more than one ion, each with its own particular charge.

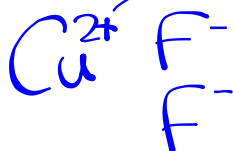
Ex. Fe^{2+} and Fe^{3+}

Ex. Name to Formula:

iron (III) oxide



Formula to Name :



Copper (II) fluoride

Handwritten annotations on the periodic table:

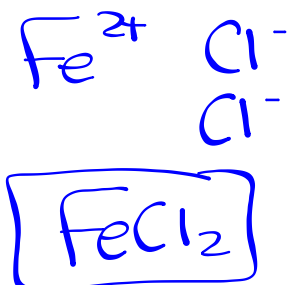
- H^+ above Hydrogen
- 2^+ above Lithium and Beryllium
- 3^+ above Iron
- 3^+ above Gallium
- 2^+ above Copper
- 3^+ above Zinc
- 3^- above Nitrogen
- 2^- above Oxygen
- 1^- above Fluorine

A red box highlights the transition metal block (Scandium to Zinc) and the lanthanide and actinide series. Arrows point from the handwritten charges to the corresponding elements in the transition metal block.

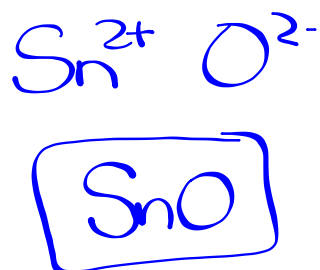
	I											III	IV	V	VI	VII	VIII
H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba		Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra		Rf	Db	Sg	Bh	Hs	Mt	Uun	Uuu	Uub						
			La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
			Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr

Write the chemical formula or name for the following ionic compounds:

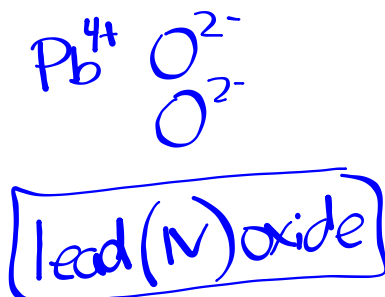
a) iron (II) chloride



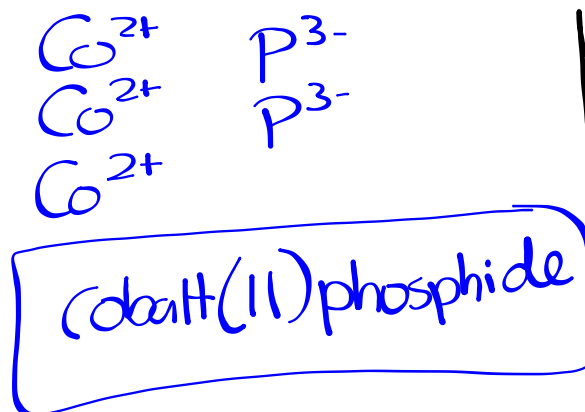
b) tin (II) oxide



c) PbO_2



d) Co_3P_2



In-Class Assignment

Binary Ionic Compounds Type II

Worksheet