Warm up

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

a) KI

K+ Ipotassium iodide

c) calcium nitride

b) SrCl₂

strontium Chloride

d) aluminum sulfide

Multi-Valent Metals

- can form more than one type of ion (always positive).
- include transition metals and some representative metals.

Ex.
$$Fe^{3+}$$
 and Fe^{2+} Pb²⁺ and Pb⁴⁺

In the periodic table the most common ion is usually listed in the key.

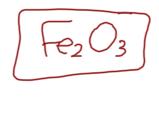
In naming multi-valent compounds (from a formula):

- [a] name the two ions
- [b] place the charge of the metal ion in roman numerals after the metal ion.
- [c] end the anion with an -ide suffix.

Ex. Name to Formula:

iron (III) oxide

$$Fe^{3+}$$
 O^{2-} Fe^{3+} O^{2-}

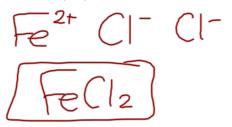


Formula to Name:

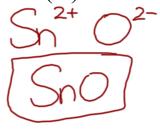


Write the chemical formula or name for the following ionic compounds:

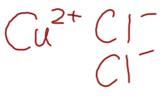
a) iron (II) chloride

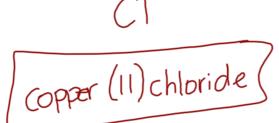


b) tin (II) oxide

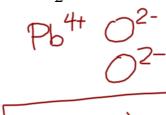


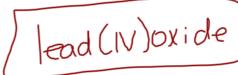
c) CuCl₂





d) PbO₂





$$Ni^{2+}O^{2-}$$
 $2.6)$ $Ni_{(s)} + O_{2(g)} \longrightarrow NiO_{(s)}$
 $nickel(II)$ oxide

Binary Ionic Compounds Type II

Worksheet

