

Name
AP Chemistry

Objectives:

- I. Ionic Nomenclature How do Ionic bonds form?
 - a. Student will be able to use the ideas of Oxidation reduction to justify how an ionic bond is formed.
 - b. Student will be able to determine if a substance is using ionic bonding.
 - c. Students will be able to write ionic formulas and names for specific ionic compounds.
 - d. Students should be able to draw a representation of an ionic crystal and relate that drawing to the chemical formula of that substance.

Ionic Compounds
Cation - Anion
Name of cation + Name of anion
monatomic anions ending = "ide"

Indicate the formula of the following ionic compounds.

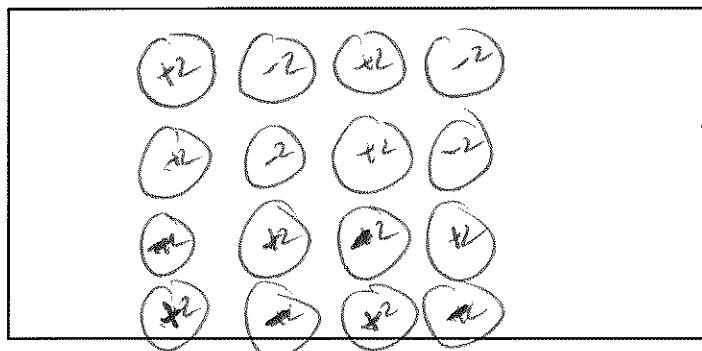
1. Iron (III) Chlorate = $Fe(ClO_3)_3$
2. Calcium Phosphite = $Ca_3(PO_3)_2$
3. Gold (III) Oxide = Au_2O_3
4. Tin (IV) Fluoride = SnF_4
5. Barium sulfate = $BaSO_4$
6. Potassium peroxide = K_2O_2
7. Copper (I) nitride = Cu_3N
8. Sodium bicarbonate = $NaHCO_3$



Indicate the name of the following chemicals

1. $Cu(CN)_2$ = Copper(II) Cyanide
2. $AlCl_3$ = Aluminum Chloride
3. HI = Hydrogen Iodide
4. $HClO$ = Hydrogen hypochlorite
5. $Sn(C_2O_4)_2$ = Tin(IV) Oxalate
6. ZnO_2 = Zinc peroxide
7. $Ca_3(PO_4)_2$ = Calcium Phosphate
8. $Fe_3(PO_4)_2$ = Iron(III) Phosphate

Analysis of ionic compounds

1. The formula for magnesium oxide is MgO , Why can't we call it Mg_2O_2 ?
* would indicate a package of 4 atoms. Not True
2. In the box below draw a particle view of a MgO crystal.



Size

 ← Slightly smaller.

 Close enough that most models might show the same.