Naming Compounds : Notes/W.S.-60

Some groups of atoms act like they were a single atom.

The common groups are given below.

Group Name	**Formula**	**Combining Capacity**
carbonate	(CO_3)	2
hydroxide	(OH)	1
nitrate	(NO_3)	1
phosphate	(PO_4)	3
sulfate	(SO_4)	2
ammonium	(NH_4)	1

These groups act like the non-metals, except for ammonium, which acts like a metal.

examples:

Compound Name	**Formula**
sodium carbonate	$Na_2(CO_3)$
calcium hydroxide	$Ca(OH)_2$
ammonium chloride	$(NH_4)Cl$

Questions:

1) Name the following compounds.

a) $Na(OH)$ _____ b) $K(NO_3)$ _____

c) $Mg(OH)_2$ _____ d) $Ca_3(PO_4)_2$ _____

e) $(NH_4)Br$ _____ f) $Sr(NO_3)_2$ _____

2) Give the formula.

a) sodium nitrate _____ b) potassium phosphate _____

c) calcium sulfate _____ d) sodium sulfate _____

e) zinc hydroxide _____ f) ammonium nitrate _____

answers: 1)a) sodium hydroxide, b) potassium nitrate, c) magnesium hydroxide, d) calcium phosphate, e) ammonium bromide, f) strontium nitrate, 2)a) $Na(NO_3)$, b) $K_3(PO_4)$, c) $Ca(SO_4)$, d) $Na_2(SO_4)$, e) $Zn(OH)_2$, f) $(NH_4)NO_3$.