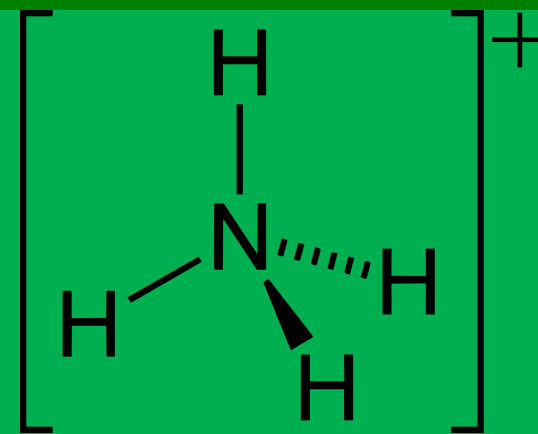


Polyatomic Compounds

- Polyatomic compounds
- Naming
- Formulas
- Exceptions
- Multivalents



Ammonium

Common Polyatomic Ions			
$\text{C}_2\text{H}_3\text{O}_2^-$	Acetate	OH^-	Hydroxide
NH_4^+	Ammonium	ClO^-	Hypochlorite
CO_3^{2-}	Carbonate	NO_3^-	Nitrate
ClO_3^-	Chlorate	NO_2^-	Nitrite
ClO_2^-	Chlorite	$\text{C}_2\text{O}_4^{2-}$	Oxalate
CrO_4^{2-}	Chromate	ClO_4^-	Perchlorate
CN^-	Cyanide	MnO_4^-	Permanganate
$\text{Cr}_2\text{O}_7^{2-}$	Dichromate	PO_4^{3-}	Phosphate
HCO_3^-	Bicarbonate	SO_4^{2-}	Sulfate
HSO_4^-	Bisulfate	SO_3^{2-}	Sulfite
HSO_3^-	Bisulfite		

Preview File

Please enjoy this preview of your Student Version of the presentation. Please note within this sample file:

- Some slides appear blank because they have been removed
- Student versions have portions of the text removed which is given in the teacher version and appear as _____ which the students are to fill in
- Other slides may have on them, this represents writing that has been removed on this sample

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Polyatomic Compounds

- Groups of atoms that can be found as parts of a molecule
- These atoms bond in such a way that they have a net electric charge (usually negative)

- _____
- Here are

You do not need to memorize these!!!!



Common Polyatomic Ions				
$\text{C}_2\text{H}_3\text{O}_2^-$	Acetate		OH^-	Hydroxide
NH_4^+	Ammonium		ClO^-	Hypochlorite
CO_3^{2-}	Carbonate		NO_3^-	Nitrate
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HCO_3^-	Bicarbonate		SO_4^{2-}	Sulfate
HSO_4^-	Bisulfate		SO_3^{2-}	Sulfite
HSO_3^-	Bisulfite			

Naming Polyatomic Compounds

1. Write the name of the metal
(including the roman numeral if necessary)
2. Write the name of the polyatomic

Note: For a polyatomic, you do not need to change the ending of the molecule to -ide.

Check Your Understanding

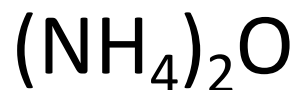
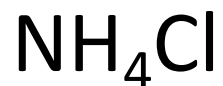
Name the following polyatomic compounds



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Check Your Understanding

Name the following polyatomic compounds



Check Your Understanding

Give the chemical formula for the following compounds

Manganese (II) Sulfide

Tin (IV) Fluoride

Copper (II) Phosphate

Ammonium Sulfate

Writing Formulas Involving Polyatomic Ions

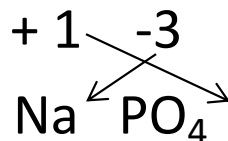
You can apply the rules for writing ionic compound formulas to polyatomic compounds just remember to treat the polyatomic ion as a single unit.

e.g. 1/ What is the chemical formula of sodium phosphate?

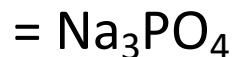
Step 1 – Write



Step 2 – Write



Step 4 – Re-write



Check Your Understanding

What is the chemical formula for Copper (II) Nitrate?

Common Polyatomic Ions				
$\text{C}_2\text{H}_3\text{O}_2^-$	Acetate		OH^-	Hydroxide
NH_4^+	Ammonium		ClO^-	Hypochlorite
CO_3^{2-}	Carbonate		NO_3^-	Nitrate
ClO_3^-	Chlorate		NO_2^-	Nitrite
ClO_2^-	Chlorite		$\text{C}_2\text{O}_4^{2-}$	Oxalate
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HCO_3^-	Bicarbonate		SO_4^{2-}	Sulfate
HSO_4^-	Bisulfate		SO_3^{2-}	Sulfite
HSO_3^-	Bisulfite			