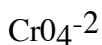


CHEMISTRY

NAMING WITH POLYATOMIC IONS

Many chemical names have what we call radicals (polyatomic ions) in them. Radicals are simply groups of atoms that carry a charge with them. There are many radicals, and you can look for tables in your text and the Table of Common Ions handout. Listed below are some examples....



The only common positively charged polyatomic ion or radical is the ammonium group... NH_4^{+1} . When naming simple compounds that contain a radical simply name the entire radical using its group name rather than naming every element in it. For example...

CaSO_4 is calcium sulfate...

don't try to name it calcium sulfur oxide or some similar way... the entire SO_4 is named with its group name... sulfate.

Na_3PO_4 is sodium phosphate...

don't try to name this sodium phosphorus oxide or some similar way... the whole PO_4 group is called a phosphate.

STUDENT PRACTICE

1. See if you can give the names for the following compounds...

CaSO_4	
LiNO_3	
Ag_2SO_4	
BaCrO_4	
NaNO_3	
$(\text{NH}_4)_2\text{CO}_3$	
NaHCO_3	
$\text{Ca}_3(\text{PO}_4)_3$	
$\text{Al}(\text{OH})_3$	
$\text{Cu}(\text{C}_2\text{H}_3\text{O}_2)_2$	
Ag_2CrO_4	