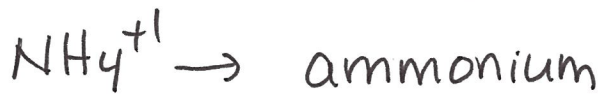


# Naming compounds with Polyatomic ions

9

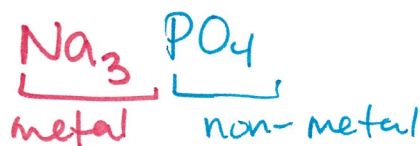
When dealing with polyatomic ions, we treat them as if they are a single atom with a charge.



ex.

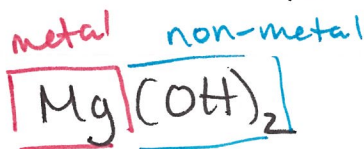


calcium carbonate



sodium phosphate

note we  
don't need to  
change ending  
to "ide"



magnesium hydroxide

Practice (answers on next page)



- ① potassium sulfate
- ② lithium hypochlorite
- ③ ammonium oxide

note oxygen is not polyatomic ion so we have to change ending to "ide"

④ iron (II) nitrite

⑤ magnesium cyanide

note CN is a polyatomic ion that ends in "ide" which can trick you into thinking its an element on the periodic table. There are a few polyatomic ions with this characteristic. Know them so you don't get tricked!

note iron is a multivalent metal so we have to use roman numerals to indicate the charge used.

note ammonium ( $\text{NH}_4^+$ ) is the only polyatomic ion with a positive charge.

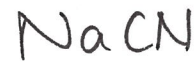
# Writing formulas for polyatomic ions

(11)

sodium phosphate



sodium cyanide



magnesium chlorite



need parantheses when there is more than 1 polyatomic ion.

Practice (answers on the next page)

- ① beryllium chromate
- ② manganese (II) phosphite
- ③ ammonium dichromate
- ④ silver bisulfate

