

today

- 1) virginia reel
- 2) homework check
- 3) class notes

Test Friday!!

### Answers to Today's Homework:

**Naming Ions**

Name EVAN  
Period GENEST

1. Look up the following polyatomic ions on the back of your new periodic table. Write down the formula (including the charge):

ammonium <u><math>\text{NH}_4^+</math></u>	acetate <u><math>\text{C}_2\text{H}_3\text{O}_2^-</math></u>	carbonate <u><math>\text{CO}_3^{2-}</math></u>
dichromate <u><math>\text{Cr}_2\text{O}_7^{2-}</math></u>	hydroxide <u><math>\text{OH}^-</math></u>	nitrate <u><math>\text{NO}_3^-</math></u>
oxalate <u><math>\text{C}_2\text{O}_4^{2-}</math></u>	sulfate <u><math>\text{SO}_4^{2-}</math></u>	phosphate <u><math>\text{PO}_4^{3-}</math></u>

2. What element do most of the polyatomic ions have in the formula? Oxygen

3. What type of elements are found in the polyatomic ions? (metal/nonmetal) BOTH (smiley)! #tricky

Look at these naming examples to get you warmed up. Notice the asterisks to the footnoted rules

NaBr is named sodium bromide * <sup>1</sup>	Sc(OH) <sub>3</sub> is named scandium hydroxide ** <sup>2</sup>	V <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> is named vanadium (III) sulfate *** <sup>3</sup>
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\*\*\*  $\text{Ti}(\text{SO}_4)_2$  Titanium (IV) sulfate

\*\*\*  $\text{FePO}_4$  Iron III phosphate

\* NaBr sodium bromide

\*\*  $\text{Ca}(\text{C}_2\text{H}_3\text{O}_2)_2$  calcium acetate

\*  $\text{K}_3\text{N}$  potassium nitride

\*\*\* CuOH Copper (I) hydroxide

\*  $\text{Zn}(\text{NO}_2)_2$  zinc nitrite

$\text{V}_2\text{S}_3$  vanadium (III) sulfide

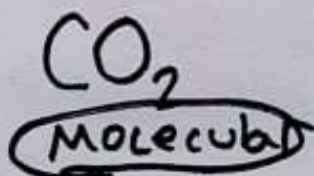
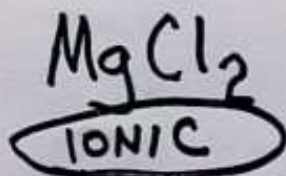
$\text{Ca}_3\text{P}_2$  calcium phosphide

## PURPOSE

## HOW TO NAME USING GREEK PREFIXES

1) Never use this for compounds with a metal.

2) Only use this for compounds that are molecular.



3) Use these Greek words:

mono	- ONE
di	- TWO
tri	- THREE
tetra	- FOUR
penta	- FIVE
hexa	- SIX

4) examples

$N_2H_4$  dinitrogen tetrahydride

$N_2O_5$  dinitrogen pentoxide

$N_2O$  dinitrogen monoxide

$NO_2$  ~~monoxide~~ dioxide  
~~nitrogen dioxide~~  
nitrogen dioxide

\* If the formula starts  
with a single atom  
skip the "mono"