

1.51

150 lbs

diameter = 8.25mm

4.125mm

0.4125cm

Density $\frac{8.94g}{cm^3}$

"h" ft

$V = \pi r^2 h$

$7610.74 = \pi (0.4125)^2 h$

| | | |
|------------------|--------|---------|
| 1cm ³ | 153.6g | 150 lbs |
| 8.94g | 1 lb | |

= 7610.74 cm³

Sep 16-7:28 AM

Thompson - Discovery of e⁻

Glas tube (Vacuum)

CATHODE RAY TUBE

Cathode (-) pole

Anode (+) pole

Wm Crookes Magnet

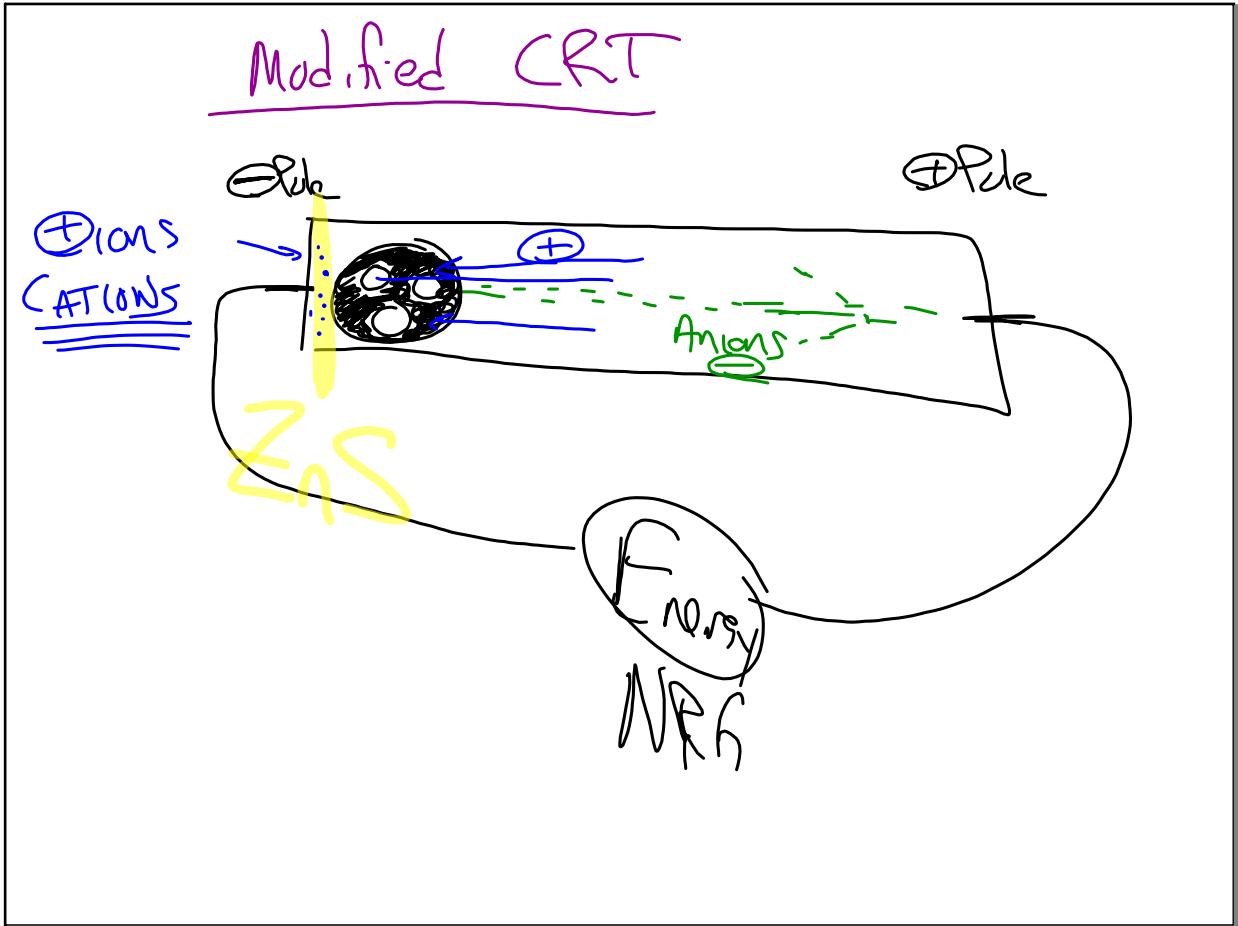
Cations

e⁻

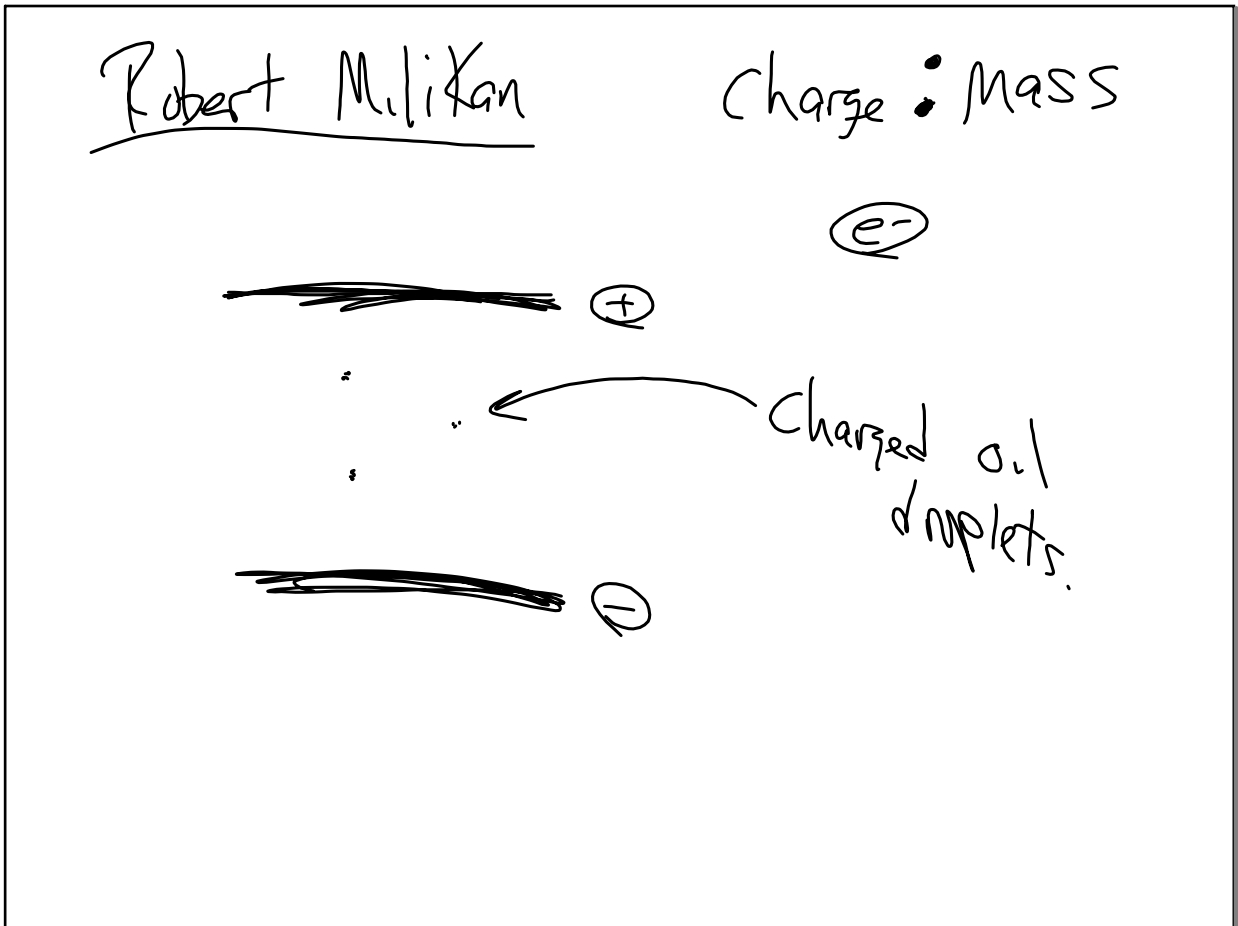
Anions

Energy source

Sep 16-7:59 AM



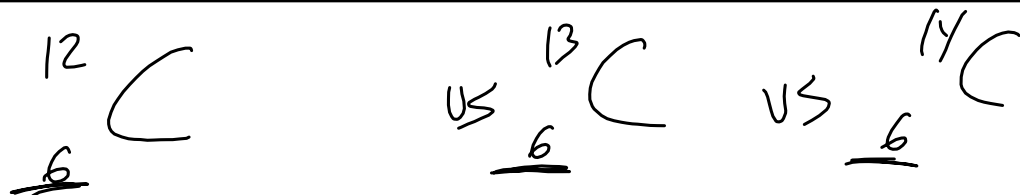
Sep 16-8:10 AM



Sep 16-8:15 AM

Henry Moseley - found neutrons
X-Ray diffractions

Sep 16-8:17 AM



Isotopes

→ Same At#, #p, elem
D#n

Masson PT = Weighted avg of all the
Naturally occurring isotopes

Sep 16-8:18 AM

(2.4) p1

| | | |
|--------|------------------|------------|
| 75.78% | ^{35}Cl | 34.969 amu |
| 24.22% | ^{37}Cl | 36.966 |

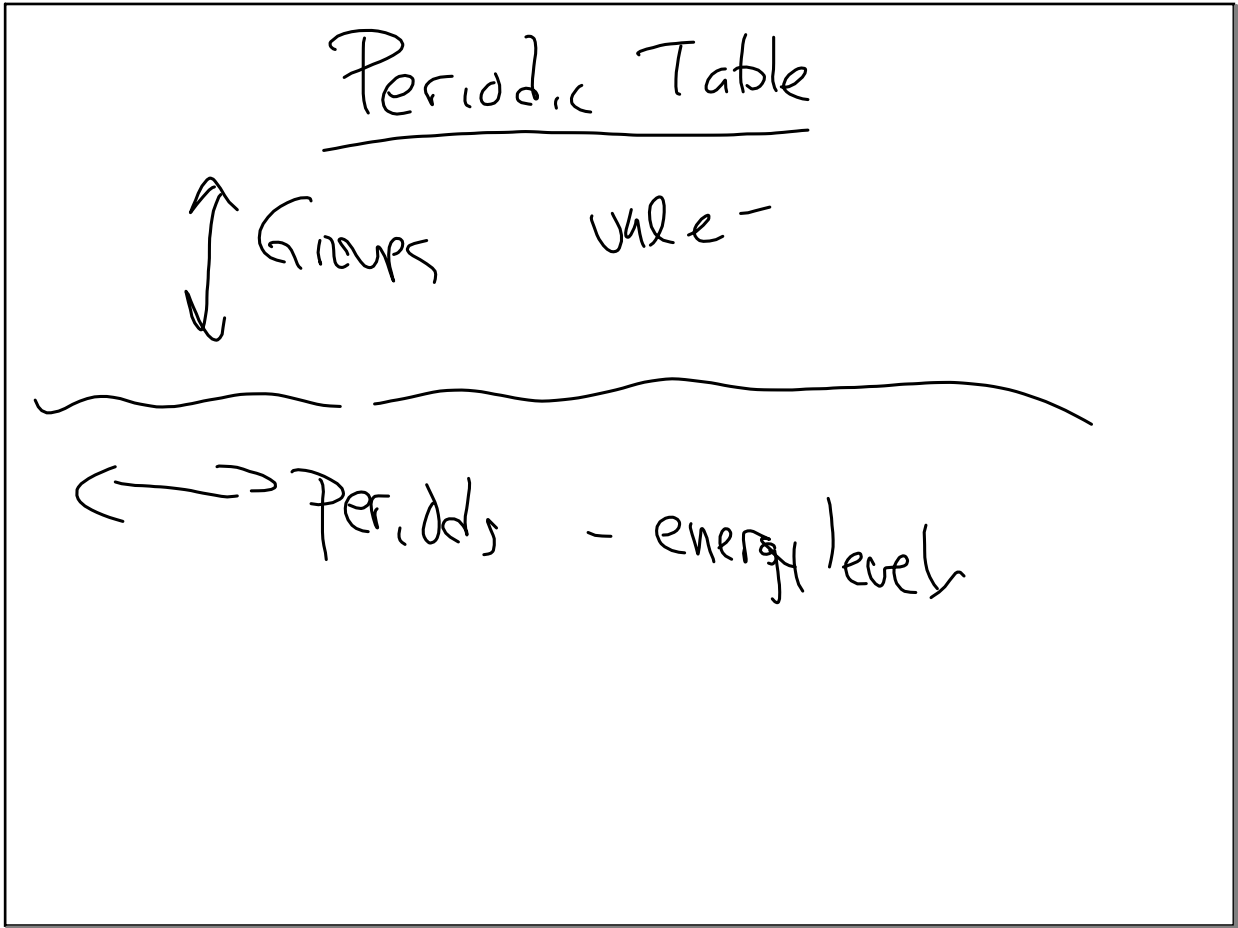
Weighted avg

$$0.7578(34.969) + 0.2422(36.966) =$$

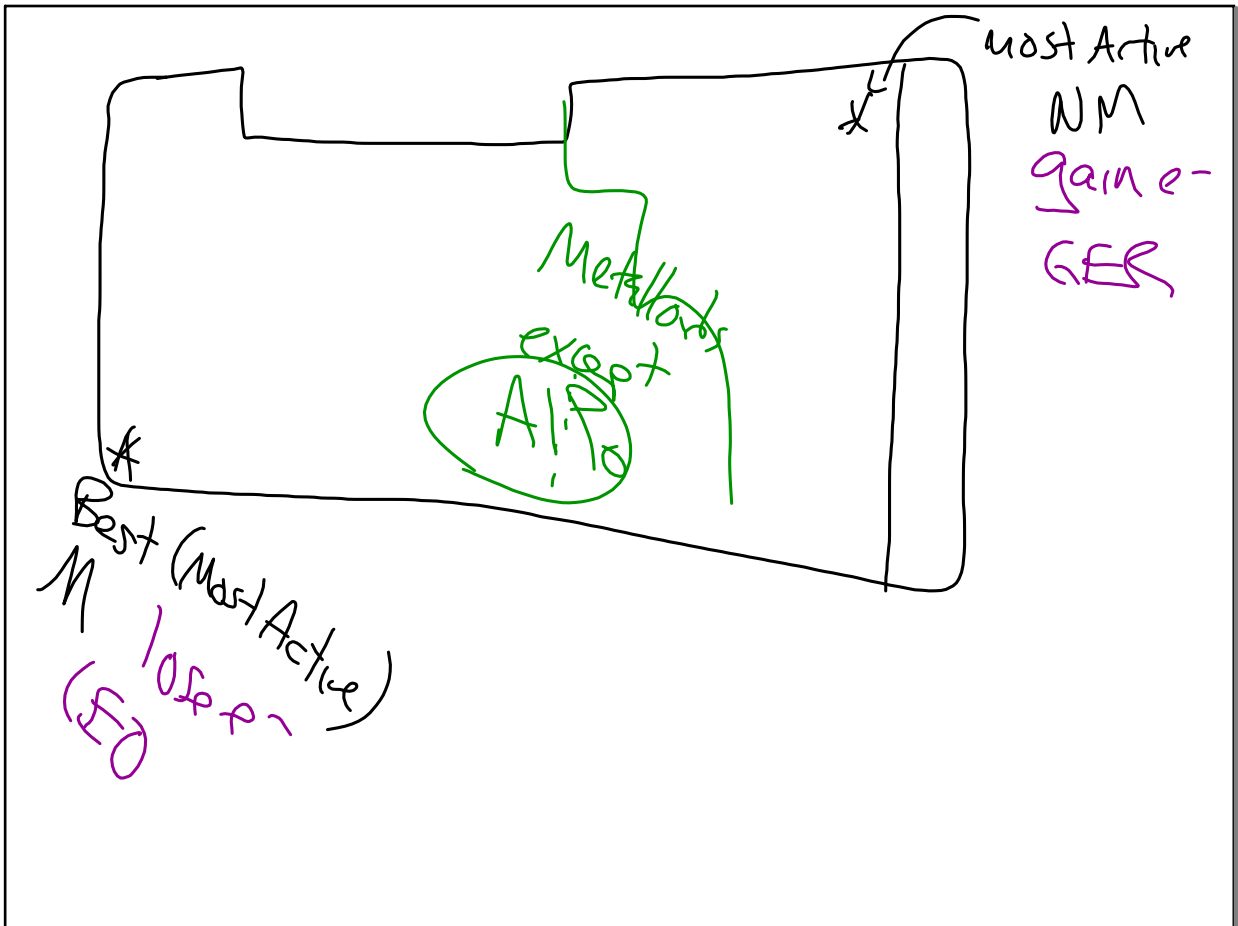
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| | | | |
|--------------|----------------|-------------------------------|---------------------------------------|
| Istope | $\Delta \#n$ | | |
| Ion | $\Delta \#e^-$ | \rightarrow Cation \oplus | <u>Oxidation</u> lost e^- LEO |
| | | \rightarrow Anion \ominus | Gain e^- <u>Reduction</u> GER |
| new element. | $\Delta \#p$ | | |

Sep 16-8:23 AM



Sep 16-8:36 AM

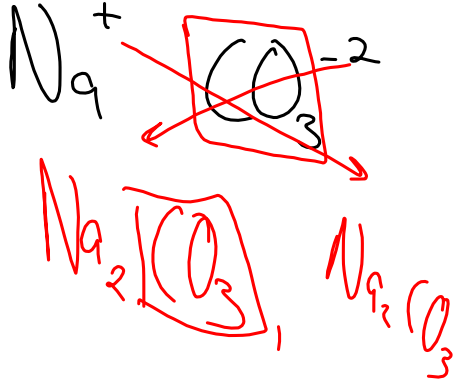


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Naming Compounds

Ionic

Sodium Carbonate



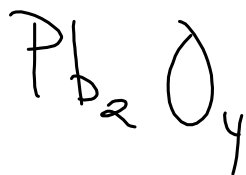
Binary Compounds



(# Moles of each element
 in the compound)
 Subscripts

Sep 16-8:54 AM

Lead(IV) oxide

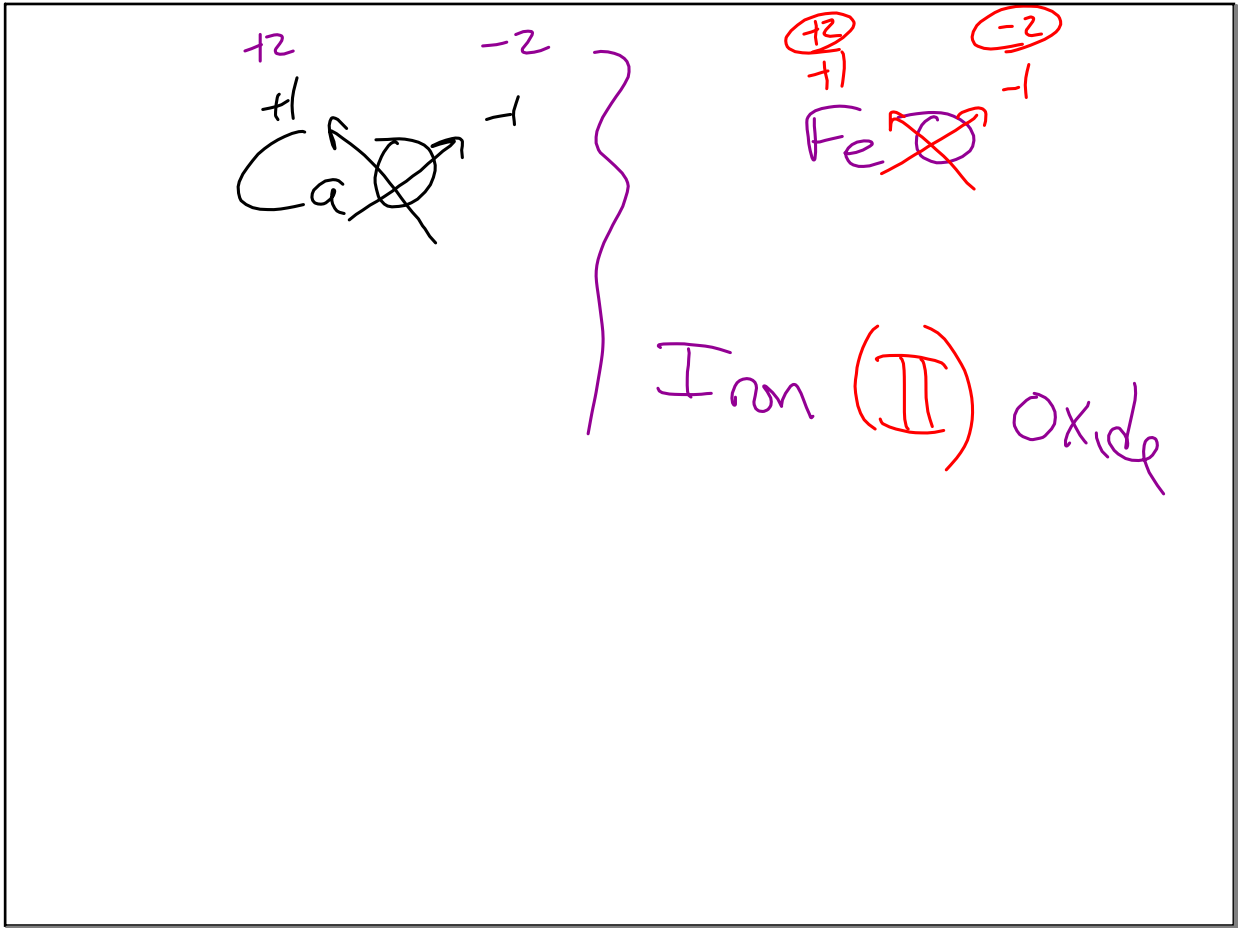


ORSO
Molecular formula

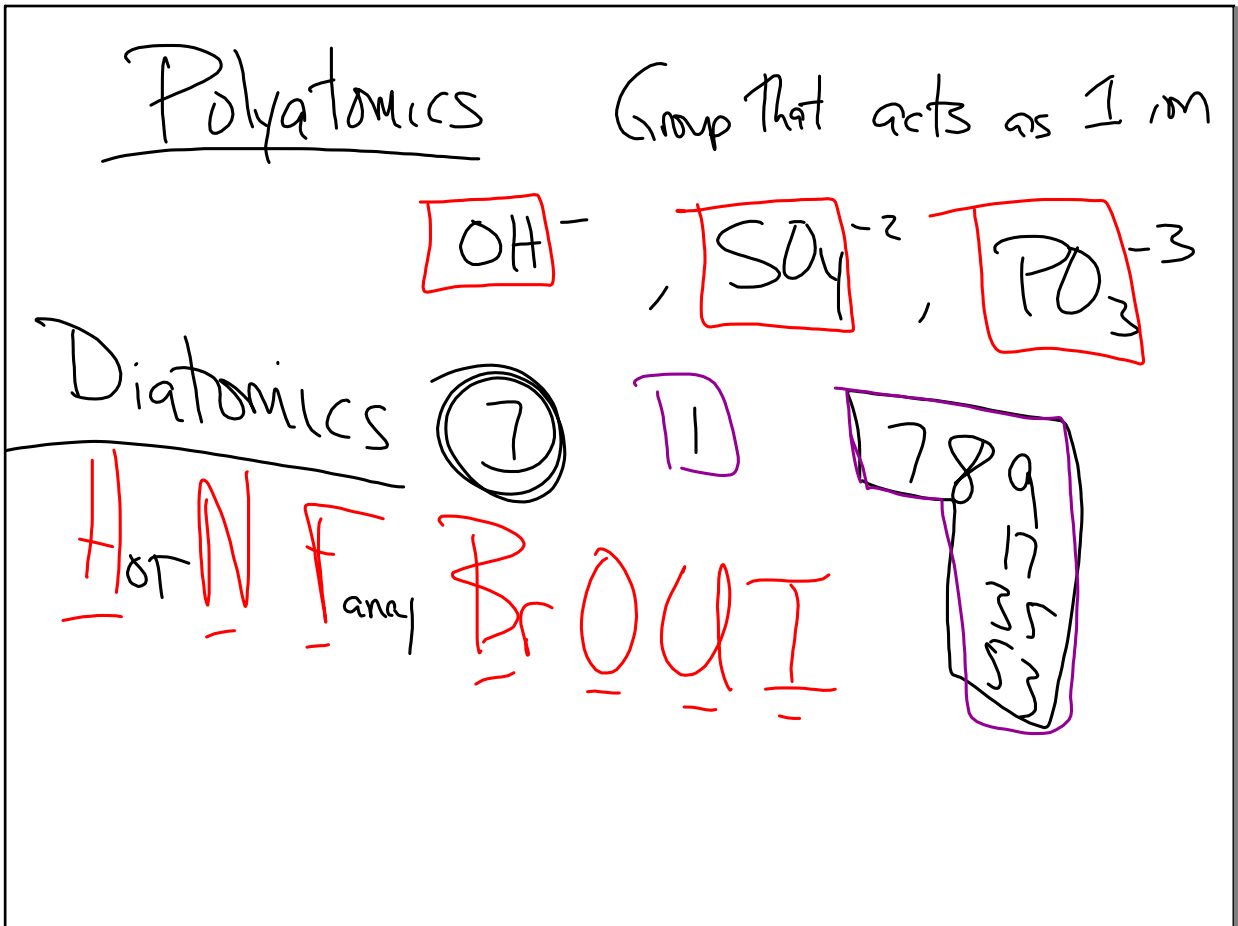


inorganic
Empirical formula (reduced)

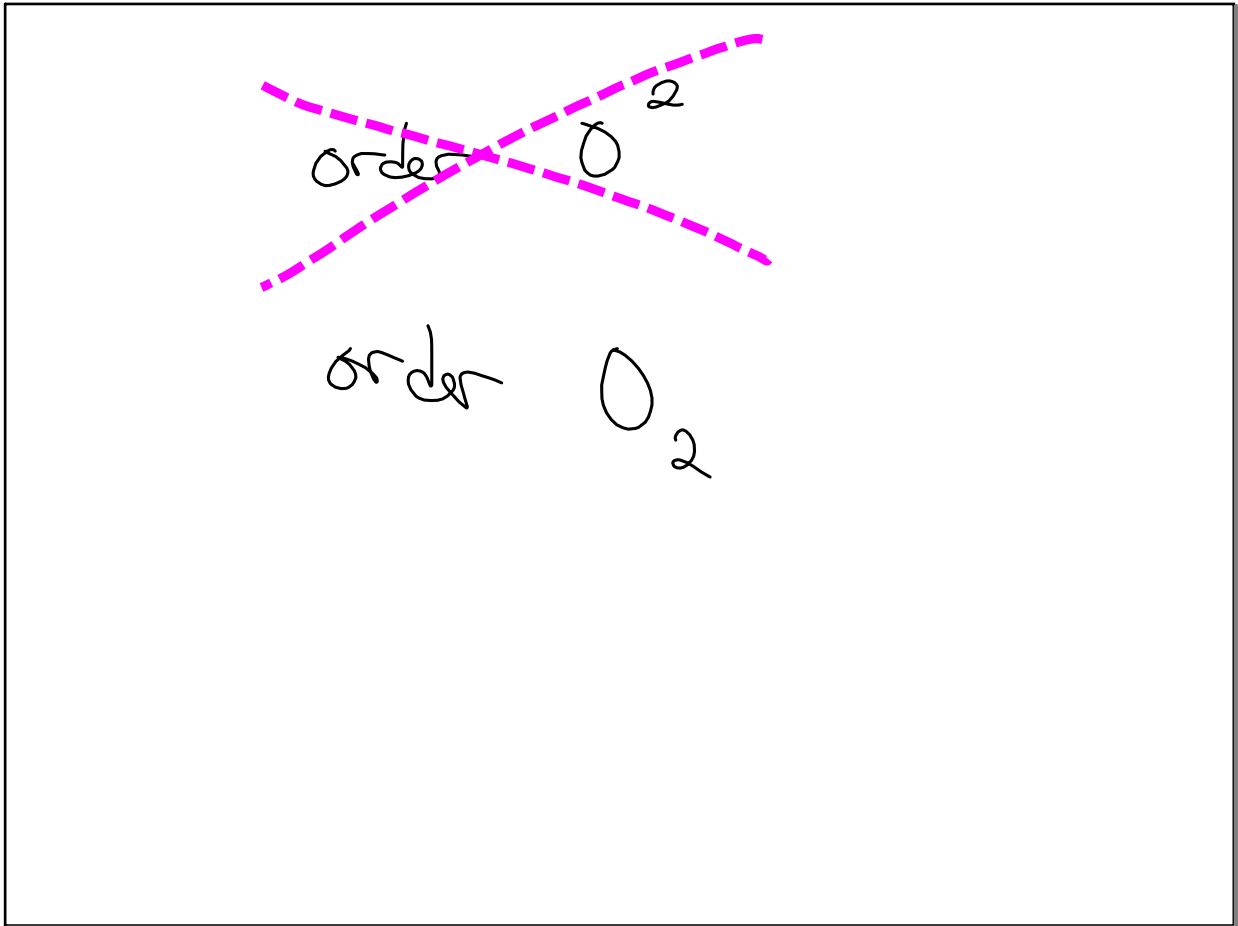
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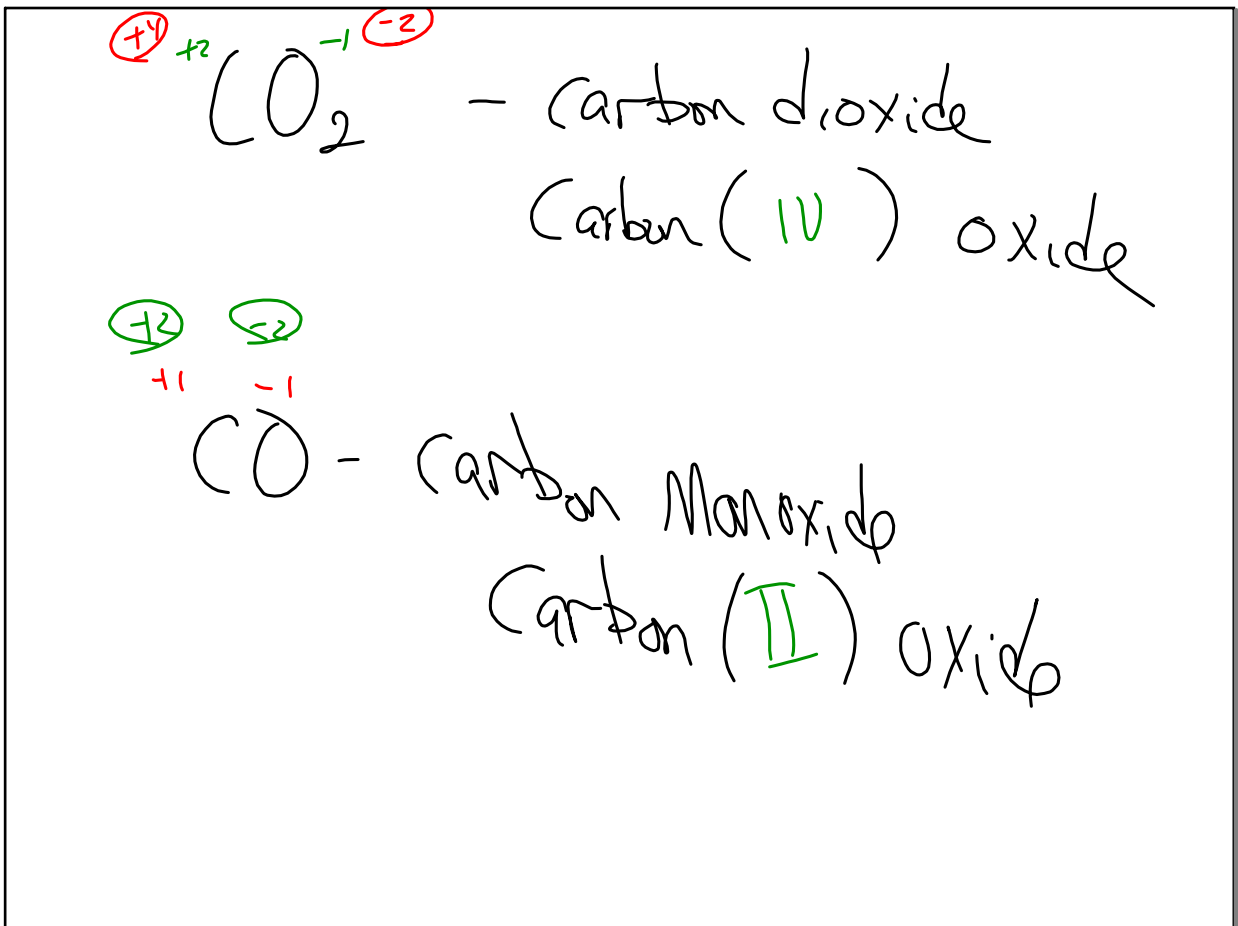
Sep 16-9:02 AM



Sep 16-9:03 AM



Sep 16-9:07 AM



Sep 16-9:08 AM