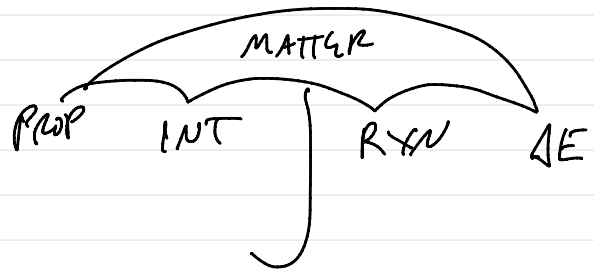


**FINAL
REVIEW**



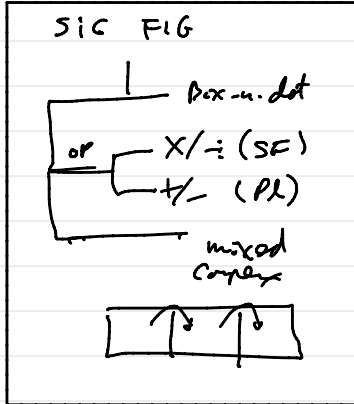
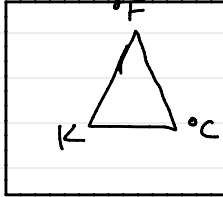
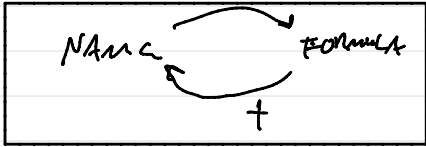
NUMERICALS

I		ate ite
II	RU	
III	RU	
hydro_ite		ic ous

per_ite
|
ic - oate
|
ous - if
|
hypo_ous

OBs → Theory
↑ ↓
acid ← Pluricene
- Theory vs Law
- "falsifiable"

- MEMORIS
- 7 diatoms
 - 7 metric
 - 5 always soluble
 - 7 SA / 8 SB
 - ic acids
 - 6. pac (TAP, II)
 - 7 rxn types

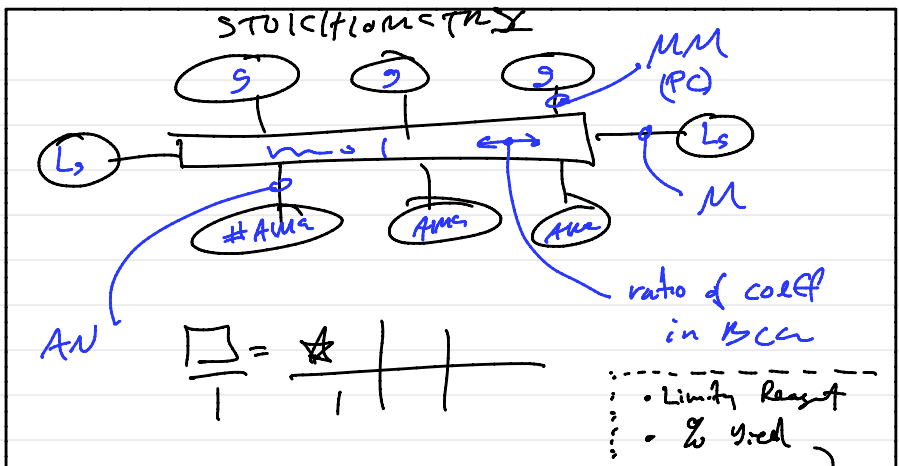


$$p+n = A \quad \text{CHG}$$

$$p = z$$

$$A - z = \# \text{net}$$

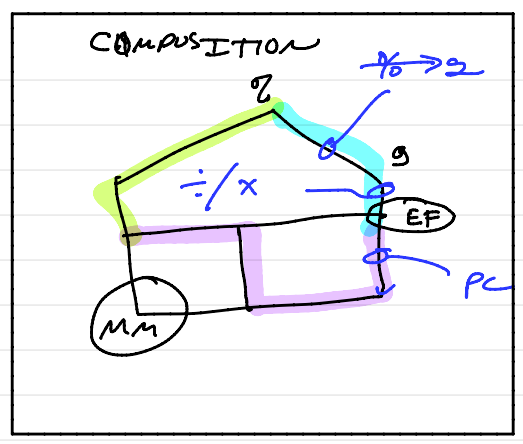
$$z - \#e = \text{CHG}$$



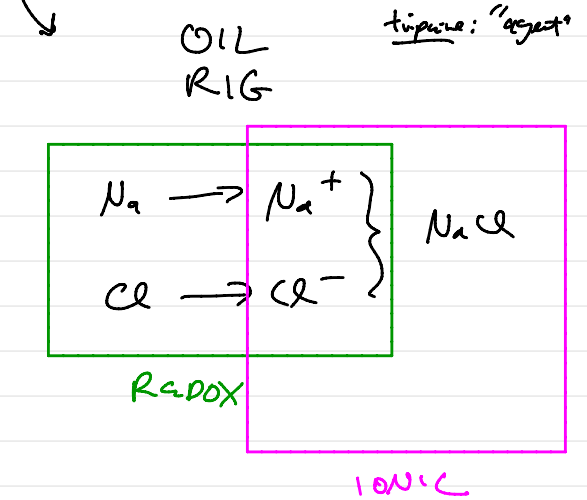
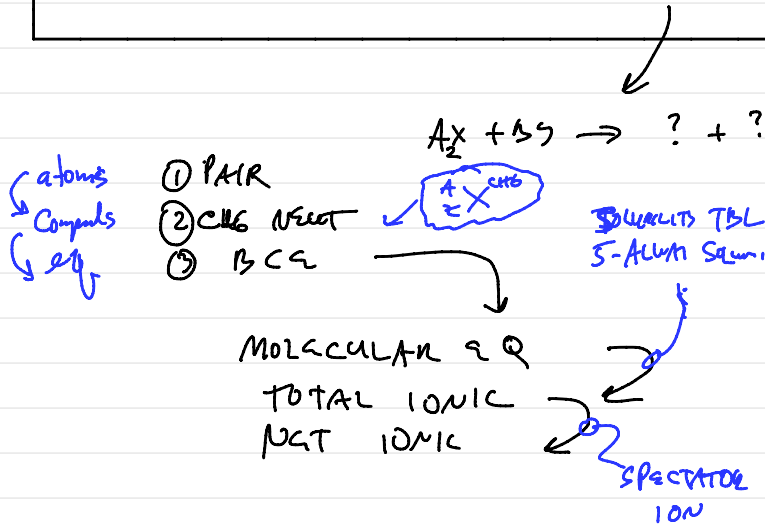
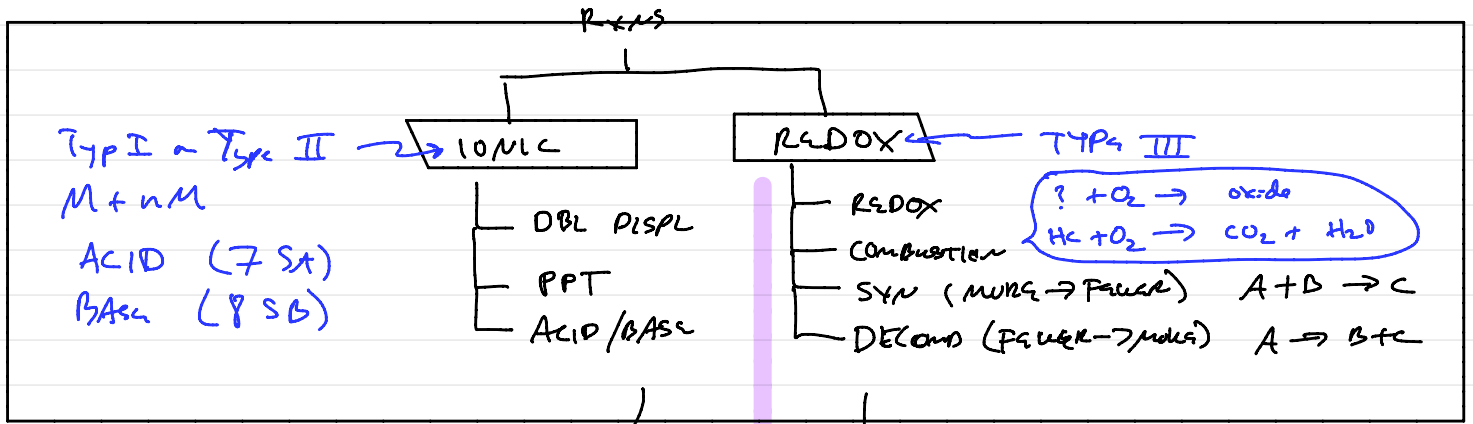
$$\% \text{ yield} = \frac{\Sigma \text{EXP}}{\text{THRO}} \times 100 \quad \frac{95}{100} \rightarrow 95\%$$

$$\% \text{ error} = \frac{|\Sigma \text{EXP} - \text{THRO}|}{\text{THRO}} \times 100 \quad \frac{100 - 95}{100} = 5\%$$

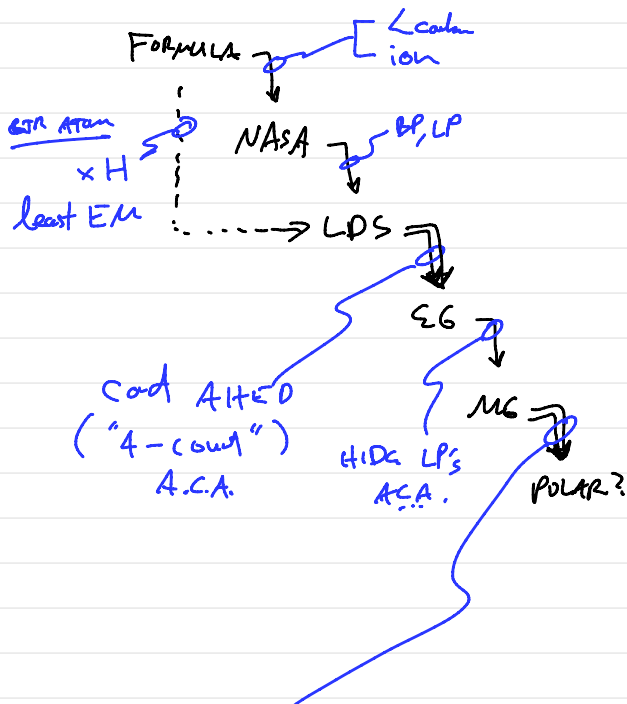
- isotope ($^{12}_6\text{C}$, $^{13}_6\text{C}$, $^{14}_6\text{C}$)
- allotrope (graphite vs. diamond)
- isoelectric (Na^+ , Ne , F^-)



- MOLARITY (mol/L)
- calc M $\frac{[m]}{L} =$
 - use M as CF $\text{r.g. } SM = \left(\frac{5 \text{ mol}}{L} \right)$
 - $MV = M'V'$
conc / d. vol

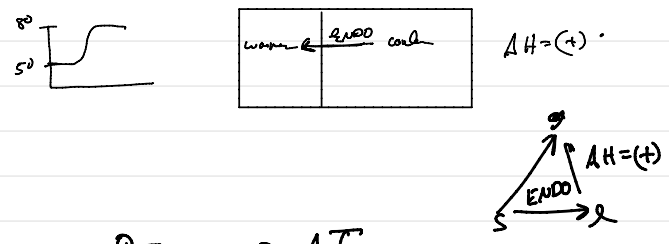
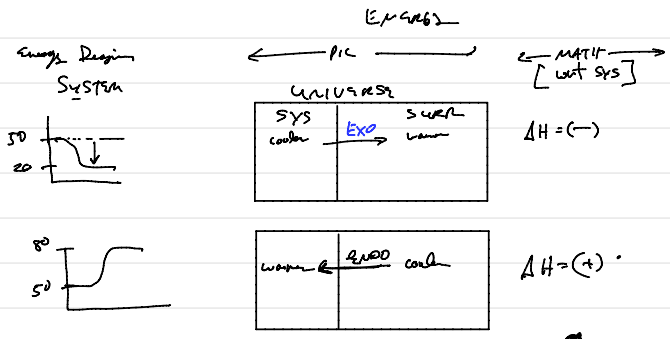


LEWIS DOT



	<u>POLAR</u>	<u>NON POLAR</u>
Symmetry ?	X	✓
Same P.G. ?	X	AND ✓
"pedot guy"	X	✓

SYMMETRY TEST
 MG has to be one of your EG ...
 MG = EG



$Q = m \cdot s \cdot \Delta T$

$\frac{\square J}{g \cdot ^\circ C}$

$\left(\frac{4.184 J}{1 cal} \right)$

$\left(\frac{1 Cal}{1 kcal} \right)$

$\left(\frac{1 Cal}{1000 cal} \right)$

(total) Gibbs free energy
 ("heat") enthalpy
 ("DIS order") entropy

$\Delta G = \Delta H - T\Delta S$

Spontaneous favorable $\Delta G_{sys} = (-)$

fav	fav	fav
unfav	unfav	unfav
?	fav	unfav
?	unfav	fav