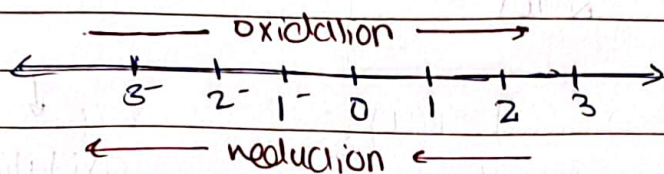


→ in term of (3) Oxidation state

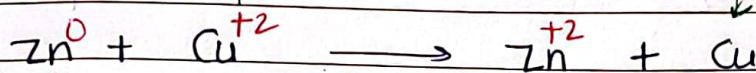
Reduction: decrease

Oxidation: increase



Displac. → redox  
redox → displ. &  
JG<sub>0</sub>

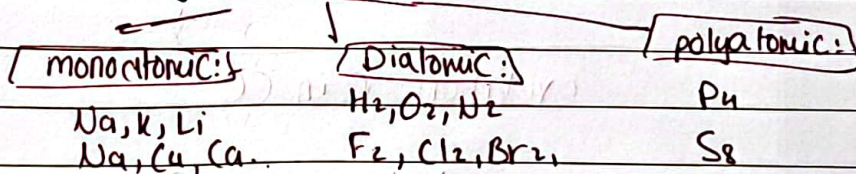
reduction  $Cu^{+2} \rightarrow Cu^0$



oxidation:  $Zn^0 \rightarrow Zn^{+2}$

Rules for oxidation state:-

1- the oxidation state for any free element → zero



2- The oxid no. of any atom in a compound from

- Group 1 = +1    Li, Na, K, Rb, Cs, Fr
  - " 2 = +2    Mg, Ca, Sr, Ba
  - " 3 = +3    always +3 only for Al
  - " 7 = -1    " -1 " " (F)
- } const. only

3- The oxidation no. of hydrogen: (+1)  
x except with Metal in Metal hydride (-1)

