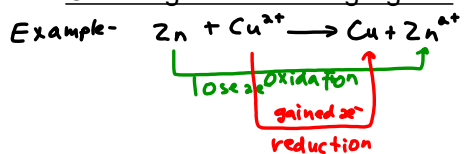


Oxidizing and Reducing Agents



1. What caused Zn to get oxidized?

$Cu^{2+}$  took  $2e^-$  from Zn.

↑  
oxidizing agent

2. What caused  $Cu^{2+}$  to get reduced?

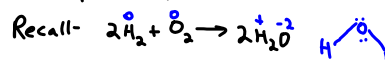
Zn gave two  $e^-$  to  $Cu^{2+}$

reducing agent

Questions p.715 #3,4

Assigning Oxidation Numbers

See table p.724 text



Assigning Oxidation Numbers.

a) Zinc metal  $Zn(s)$  element (rule #1)

b)  $KCl$  ions (rule #2)

c)  $CuO$  rule #2, 4, 22 (-2)

d)  $HCl$  rule #3  $CaH_2$

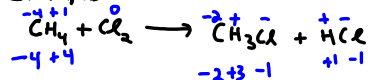
e)  $H_2O_2$  (peroxides)  $+4$   $-2$   $+4$   $-2$  rules #4,7

f)  $SiBr_4$  rules 5+6

g)  $Cr_2O_7$  rule 7 Questions p.726 #9-12

Identify Redox Reactions Using Oxidation Numbers

Examples-

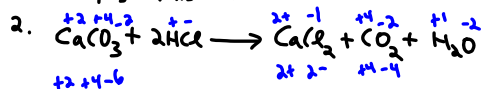


C-oxidized from -4 to -2

H- not oxidized or reduced

Cl-reduced from 0 to -1

Yes- this is a redox reaction



No change in oxidation numbers of atoms.

No- not a redox rxn. page 728, #13-16