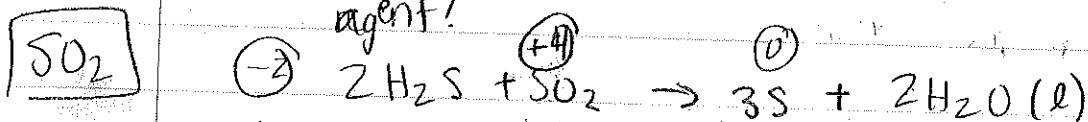


4/16/13 $O = -2$
 $H = 1$

$x + (-2) = 0$

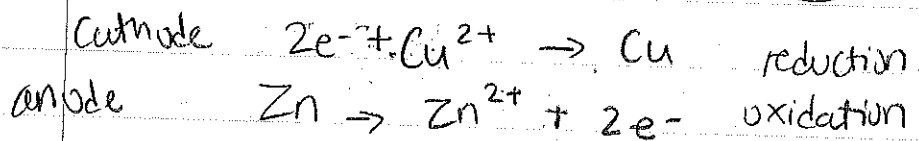
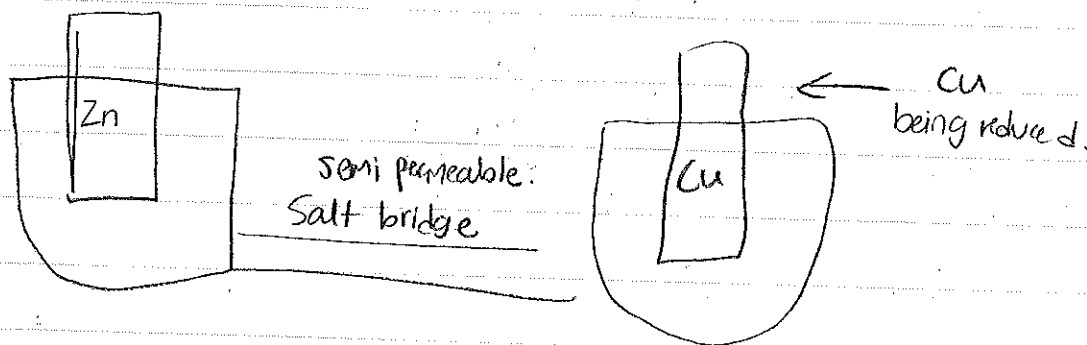
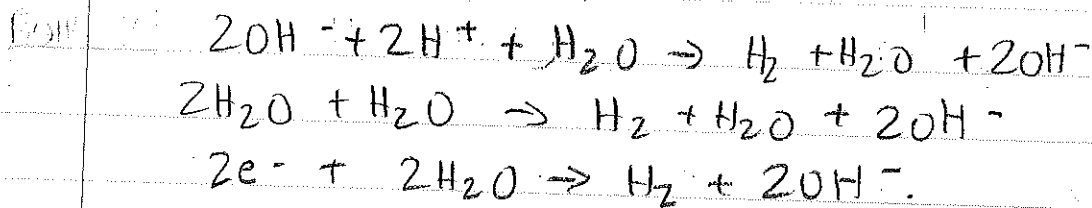
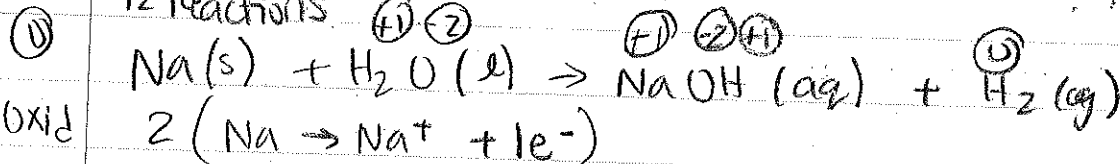
Q12.1) The oxidation number for C on CO CO_2 CO_3^{2-} C_4
 $O = -2$
 $2, 4, 4$ $(-2)(2) = -4$
 $4 - 4 = 0$ $x - 6 = -2$
 $+6 + 6$
 $x = 4$

Q12.2) In following redox reaction, what is serving as oxidizing agent?



oxidizing \rightarrow donating electron.

$\frac{1}{2}$ reactions



More active metal \rightarrow oxidizing agent.

Whole half reaction is worked in anode.

• Reduction is Cathode

• Red Cat

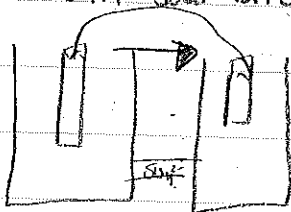
• Anode is Oxidation

An Ox

The solid thing is called anode

Assuming sulfate is your counter ion which way does it move in salt bridge?

Poll

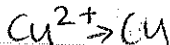
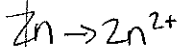


anode

cathode

oxidation

reduction



anion moves toward anode.

Poll.

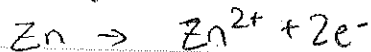
What is the serving as cathode?

- Cu strip

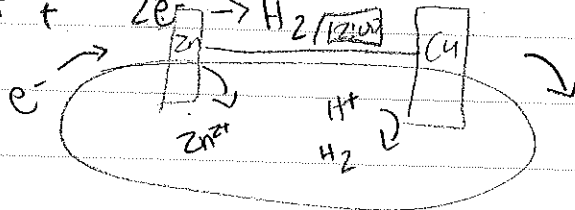
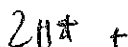
Potatloe = Salt bridge.

Converting Chem energy to electrical energy.

Ox $\frac{1}{2}$



Red $\frac{1}{2}$

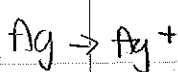


Variety of Electrochemical cells

pair different oxidation/reduction reactions for diff. measur.

|| - salt bridge this divides cell into halves.

| = show diff. compounds of each 1/2 reaction.



anode. \rightarrow

\leftarrow inert electron.

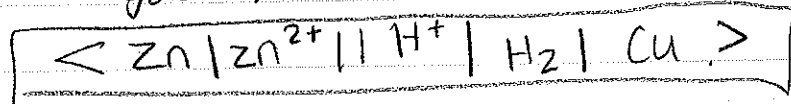


\leftarrow cathode

Pol

Potatoe Clock Cell

What goes in blanks?

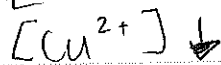
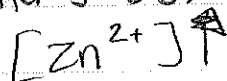


Zn - anode, oxidation

Cu - cathode.

H, H₂ \rightarrow reduction.

Batteries de.



For two cells:

$$E^\circ = E^\circ_{\text{Red}} - E^\circ_{\text{Ox}}$$

$$E^\circ = 0.34 - (-0.76)$$

$$\approx 1.1 \text{ V.}$$

Voltage - electromotive force.

push to get electrons going & pull to get electrons coming.
Reduction potential determining if its easier or harder to pull.