Metal Activity Series-Simulation

4. $Cu^{2+} + 2e^- \rightarrow Cu_{(s)}$

7.

Metal	Metal ion
Mg	Ag^+
Zn	Cu^{2+}
Cu	Zn^{2+}
Ag	Mg^{2+}

most reactive ↑ ↓ Most reactive

9. Similar order

See text p. 718 – Similar list & order

Balancing Redox Reactions
Practice Test

Balance - $\overset{0}{Zn} + \overset{+6\ -2\ 2-}{SO_4} \rightarrow \overset{+2}{Zn^{2+}} + \overset{0}{S}$

$+6\ -8$

(acidic)

Ben's answer -

$8H^+ + SO_4^{2-} + Zn \rightarrow Zn^{2+} + S + 4H_2O$

Is this correct?

Oxid. $(Zn \rightarrow Zn^{2+} + 2e^-) \times 3$

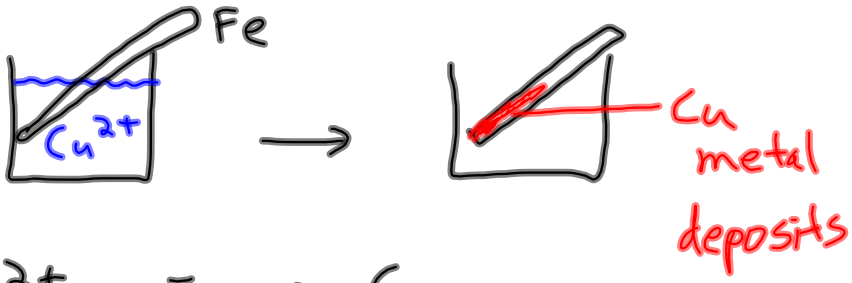
$8H^+ + SO_4^{2-} + \cancel{6e^-} \rightarrow S + 4H_2O$

$3Zn \rightarrow 3Zn^{2+} + \cancel{6e^-}$

$8H^+ + SO_4^{2-} + 3Zn \rightarrow S + 4H_2O + 3Zn^{2+}$

Electrochemical Cells

Recall-



$$Cu^{2+} + 2e^- \rightarrow Cu_{(s)}$$

$$Fe_{(s)} \rightarrow Fe^{3+} + 3e^-$$

Working cell

Read - p. 756 - 760

Redox Test Outline

1. Define & identify oxidation/ reduction reactions.
2. Oxidizing/reducing agents
3. Assign oxidation numbers
4. Balance equations using oxid. numbers
5. Writing net ionic equations
6. Balancing using half-reactions