

Loose sheet for question 6

redox system		E°/V
1	$\text{Fe}^{2+}(\text{aq}) + 2\text{e}^{-} \rightleftharpoons \text{Fe}(\text{s})$	-0.44
2	$2\text{H}_2\text{O}(\text{l}) + 2\text{e}^{-} \rightleftharpoons 2\text{OH}^{-}(\text{aq}) + \text{H}_2(\text{g})$	-0.83
3	$2\text{H}^{+}(\text{aq}) + 2\text{e}^{-} \rightleftharpoons \text{H}_2(\text{g})$	0.00
4	$\text{O}_2(\text{g}) + 2\text{H}_2\text{O}(\text{l}) + 4\text{e}^{-} \rightleftharpoons 4\text{OH}^{-}(\text{aq})$	+0.40
5	$\text{O}_2(\text{g}) + 4\text{H}^{+}(\text{aq}) + 4\text{e}^{-} \rightleftharpoons 2\text{H}_2\text{O}(\text{l})$	+1.23