

Standard Reduction Potentials

http://www.jesuitnola.org/upload/clark/Refs/red_pot.ht



strong oxidizing agents ↑	HALF-REACTION	E° (V)
	$F_2(g) + 2 e^- \rightarrow 2 F^-(aq)$	+2.87
	$O_3(g) + 2 H^+(aq) + 2 e^- \rightarrow O_2(g) + H_2O(l)$	+2.07
	$Co^{3+}(aq) + e^- \rightarrow Co^{2+}(aq)$	+1.82
	$H_2O_2(aq) + 2 H^+(aq) + 2 e^- \rightarrow 2 H_2O(l)$	+1.77
	$PbO_2(s) + 4 H^+(aq) + SO_4^{2-}(aq) + 2 e^- \rightarrow PbSO_4(s) + 2 H_2O(l)$	+1.70
	$Ce^{4+}(aq) + e^- \rightarrow Ce^{3+}(aq)$	+1.61
	$MnO_4^-(aq) + 8 H^+(aq) + 5 e^- \rightarrow Mn^{2+}(aq) + 4 H_2O(l)$	+1.51
	$Au^{3+}(aq) + 3 e^- \rightarrow Au(s)$	+1.50
	$Cl_2(g) + 2 e^- \rightarrow 2 Cl^-(aq)$	+1.36
	$Cr_2O_7^{2-}(aq) + 14 H^+(aq) + 6 e^- \rightarrow 2 Cr^{3+}(aq) + 7 H_2O(l)$	+1.33
	$MnO_2(s) + 4 H^+(aq) + 2 e^- \rightarrow Mn^{2+}(aq) + 2 H_2O(l)$	+1.23
	$O_2(g) + 4 H^+(aq) + 4 e^- \rightarrow 2 H_2O(l)$	+1.23
	$Br_2(l) + 2 e^- \rightarrow 2 Br^-(aq)$	+1.07
	$NO_3^-(aq) + 4 H^+(aq) + 3 e^- \rightarrow NO(g) + 2 H_2O(l)$	+0.96
	$2 Hg^{2+}(aq) + 2 e^- \rightarrow Hg_2^{2+}(aq)$	+0.92
	$Hg_2^{2+} + 2 e^- \rightarrow 2 Hg(l)$	+0.85
	$Ag^+(aq) + e^- \rightarrow Ag(s)$	+0.80
	$Fe^{3+}(aq) + e^- \rightarrow Fe^{2+}(aq)$	+0.77
	$O_2(g) + 2 H^+(aq) + 2 e^- \rightarrow H_2O_2(aq)$	+0.68
	$MnO_4^-(aq) + 2 H_2O(l) + 3 e^- \rightarrow MnO_2(s) + 4 OH^-(aq)$	+0.59
	$I_2(s) + 2 e^- \rightarrow 2 I^-(aq)$	+0.53
	$O_2(g) + 2 H_2O + 4 e^- \rightarrow 4 OH^-(aq)$	+0.40
	$Cu^{2+}(aq) + 2 e^- \rightarrow Cu(s)$	+0.34
	$AgCl(s) + e^- \rightarrow Ag(s) + Cl^-(aq)$	+0.22
	$SO_4^{2-}(aq) + 4 H^+(aq) + 2 e^- \rightarrow SO_2(g) + 2 H_2O(l)$	+0.20
	$Cu^{2+}(aq) + e^- \rightarrow Cu^+(aq)$	+0.15
	$Sn^{4+}(aq) + 2 e^- \rightarrow Sn^{2+}(aq)$	+0.13
	$2 H^+(aq) + 2 e^- \rightarrow H_2(g)$	0.00
	$Pb^{2+}(aq) + 2 e^- \rightarrow Pb(s)$	-0.13
	$Sn^{2+}(aq) + 2 e^- \rightarrow Sn(s)$	-0.14
	$Ni^{2+}(aq) + 2 e^- \rightarrow Ni(s)$	-0.25
	$Co^{2+}(aq) + 2 e^- \rightarrow Co(s)$	-0.28
	$PbSO_4(s) + 2 e^- \rightarrow Pb(s) + SO_4^{2-}(aq)$	-0.31
	$Cd^{2+}(aq) + 2 e^- \rightarrow Cd(s)$	-0.40
	$Fe^{2+}(aq) + 2 e^- \rightarrow Fe(s)$	-0.44



= reduction



= oxidation

very likely

unlikely

$Zn^{2+}(aq) + 2 e^- \rightarrow Zn(s)$	-0.76
$2 H_2O(l) + 2 e^- \rightarrow H_2(g) + 2 OH^-(aq)$	-0.83
$Mn^{2+}(aq) + 2 e^- \rightarrow Mn(s)$	-1.18
$Al^{3+}(aq) + 3 e^- \rightarrow Al(s)$	-1.66
$Be^{2+}(aq) + 2 e^- \rightarrow Be(s)$	-1.85
$Mg^{2+}(aq) + 2 e^- \rightarrow Mg(s)$	-2.37
$Na^+(aq) + e^- \rightarrow Na(s)$	-2.71
$Ca^{2+}(aq) + 2 e^- \rightarrow Ca(s)$	-2.87
$Sr^{2+}(aq) + 2 e^- \rightarrow Sr(s)$	-2.89
$Ba^{2+}(aq) + 2 e^- \rightarrow Ba(s)$	-2.90
$K^+(aq) + e^- \rightarrow K(s)$	-2.93
$Li^+(aq) + e^- \rightarrow Li(s)$	-3.05