

STANDARD REDUCTION POTENTIALS FOR HALF-REACTIONS

Ionic concentrations are a 1 M in water at 25 °C

Half-reaction	E° (Volts)
$F_{2(g)} + 2e^- \rightarrow 2F^-$	+2.87
$H_2O_2 + 2H^+ + 2e^- \rightarrow 2H_2$	+1.77
$MnO_4^- + 8H^+ + 5e^- \rightarrow Mn^{2+} + 4H_2O$	+1.52
$Au^{3+} + 3e^- \rightarrow Au_{(s)}$	+1.50
$Cl_{2(g)} + 2e^- \rightarrow 2Cl^-$	+1.36
$Cr_2O_7^{2-} + 14H^+ + 6e^- \rightarrow 2Cr^{3+} + 7H_2O$	+1.33
$MnO_{2(s)} + 4H^+ + 2e^- \rightarrow Mn^{2+} + 2H_2O$	+1.28
$\frac{1}{2}O_{2(g)} + 2H^+ + 2e^- \rightarrow H_2O$	+1.23
$Br_{2(l)} + 2e^- \rightarrow 2Br^-$	+1.06
$NO_3^- + 4H^+ + 3e^- \rightarrow NO_{(g)} + 2H_2O$	+0.96
$\frac{1}{2}O_{2(g)} + 2H^+ + 2e^- \rightarrow H_2O$	+0.82
$Ag^+ + e^- \rightarrow Ag_{(s)}$	+0.80
$NO_3^- + 2H^+ + e^- \rightarrow NO_{2(g)} + H_2O$	+0.78
$Fe^{3+} + e^- \rightarrow Fe^{2+}$	+0.77
$O_{2(g)} + 2H^+ + 2e^- \rightarrow H_2O_2$	+0.68
$I_{2(s)} + 2e^- \rightarrow 2I^-$	+0.53
$Cu^{2+} + 2e^- \rightarrow Cu_{(s)}$	+0.34
$SO_4^{2-} + 4H^+ + 2e^- \rightarrow SO_{2(g)} + 2H_2O$	+0.17
$Sn^{4+} + 2e^- \rightarrow Sn^{2+}$	+0.15
$S_{(s)} + 2H^+ + 2e^- \rightarrow H_2S_{(g)}$	+0.14
$2H^+ + 2e^- \rightarrow H_{2(g)}$	0.00
$Fe^{3+} + 3e^- \rightarrow Fe_{(s)}$	-0.04
$Pb^{2+} + 2e^- \rightarrow Pb_{(s)}$	-0.13
$Sn^{2+} + 2e^- \rightarrow Sn_{(s)}$	-0.14
$Ni^{2+} + 2e^- \rightarrow Ni_{(s)}$	-0.25
$Cd^{2+} + 2e^- \rightarrow Cd_{(s)}$	-0.40
$Fe^{2+} + 2e^- \rightarrow Fe_{(s)}$	-0.44
$Cr^{3+} + 3e^- \rightarrow Cr_{(s)}$	-0.74
$Zn^{2+} + 2e^- \rightarrow Zn_{(s)}$	-0.76
$2H_2O + 2e^- \rightarrow 2OH^- + H_{2(g)}$	-0.83
$Mn^{2+} + 2e^- \rightarrow Mn_{(s)}$	-1.18
$Al^{3+} + 3e^- \rightarrow Al_{(s)}$	-1.66
$Mg^{2+} + 2e^- \rightarrow Mg_{(s)}$	-2.37
$Na^+ + e^- \rightarrow Na_{(s)}$	-2.71
$Ca^{2+} + 2e^- \rightarrow Ca_{(s)}$	-2.87
$Sr^{2+} + 2e^- \rightarrow Sr_{(s)}$	-2.89
$Ba^{2+} + 2e^- \rightarrow Ba_{(s)}$	-2.90
$Cs^+ + e^- \rightarrow Cs_{(s)}$	-2.92
$K^+ + e^- \rightarrow K_{(s)}$	-2.92
$Li^+ + e^- \rightarrow Li_{(s)}$	-3.00