STANDARD REDUCTION POTENTIALS at 25°C **CHEMISTRY BC2001x**

OXIDIZING AGENT	**+ n e^- →**	**REDUCING AGENT**	**$\mathscr{E}$ ° (Volts)**
STRONGEST →	$F_2(g) + 2\ e^-$ →	$2\ F^-$ **← WEAKEST**	2.87
$H_2O_2 + 2\ H^+ + 4\ e^-$ →	$2\ H_2O$		1.776
$PbO_2(s) + SO_4^{2-} + 4\ H^+ + 2\ e^-$ →	$PbSO_4(s) + 2\ H_2O$		1.685
$MnO_4^- + 4\ H^+ + 3\ e^-$ →	$MnO_2(s) + 2\ H_2O$		1.679
$MnO_4^- + 8\ H^+ + 5\ e^-$ →	$Mn^{2+} + 4\ H_2O$		1.491
$PbO_2(s) + 4\ H^+ + 2\ e^-$ →	$Pb^{2+} + 2\ H_2O$		1.46
$Au^{3+} + 3\ e^-$ →	$Au(s)$		1.42
$Cl_2(g) + 2\ e^-$ →	$2\ Cl^-$		1.358
$Cr_2O_7^{2-} + 14\ H^+ + 6\ e^-$ →	$2\ Cr^{3+} + 7\ H_2O$		1.33
$O_2(g) + 4\ H^+ + 4\ e^-$ →	$2\ H_2O$		1.229
$MnO_2(s) + 4\ H^+ + 2\ e^-$ →	$Mn^{2+} + 2\ H_2O$		1.208
$2\ IO_3^- + 12\ H^+ + 10\ e^-$ →	$I_2 + 6\ H_2O$		1.195
$Br_2(aq) + 2\ e^-$ →	$2\ Br^-$		1.087
$Br_2(\ell) + 2\ e^-$ →	$2\ Br^-$		1.0652
$NO_3^- + 4\ H^+ + 3\ e^-$ →	$NO(g) + 2\ H_2O$		0.96
$NO_3^- + 3\ H^+ + 2\ e^-$ →	$HNO_2 + H_2O$		0.94
$2\ Hg^{2+} + 2\ e^-$ →	Hg_2^{2+}		0.920
$Hg^{2+} + 2\ e^-$ →	$Hg(\ell)$		0.855
$Ag^+ + e^-$ →	$Ag(s)$		0.799
$Hg_2^{2+} + 2\ e^-$ →	$2\ Hg(\ell)$		0.789
$Fe^{3+} + e^-$ →	Fe^{2+}		0.771
$O_2(g) + 2\ H^+ + 4\ e^-$ →	H_2O_2		0.682
$Ag_2SO_4(s) + 2\ e^-$ →	$2\ Ag(s) + SO_4^{2-}$		0.653
$MnO_4^- + 2\ H_2O + 3\ e^-$ →	$MnO_2(s) + 4\ OH^-$		0.588
$I_2(s) + 2\ e^-$ →	$2\ I^-$		0.535
$Ag_2CrO_4(s) + 2\ e^-$ →	$2\ Ag(s) + CrO_4^{2-}$		0.446
$O_2(g) + 2\ H_2O + 4\ e^-$ →	$4\ OH^-$		0.401
$Cu^{2+} + 2\ e^-$ →	$Cu(s)$		0.340
$Hg_2Cl_2(s) + 2\ e^-$ →	$2\ Hg(\ell) + 2\ Cl^-$		0.268
$AgCl(s) + e^-$ →	$Ag(s) + Cl^-$		0.2223
$Co(OH)_3(s) + e^-$ →	$Co(OH)_2(s) + OH^-$		0.17
$Cu^{2+} + 2\ e^-$ →	Cu^+		0.153
$Sn^{4+} + 2\ e^-$ →	Sn^{2+}		0.15
$S_4O_6^{2-} + 2\ e^-$ →	$2\ S_2O_3^{2-}$		0.09

$AgBr(s) + e^- \rightarrow$	$Ag(s) + Br^-$		0.0713
$NO_3^- + H_2O + 2\ e^- \rightarrow$	$NO_2^- + 2\ OH^-$		+0.01
$2\ H^+ + 2\ e^- \rightarrow$	**$H_2(g)$**		**0.0000**
$Fe^{3+} + 3\ e^- \rightarrow$	$Fe(s)$		–0.036
$Pb^{2+} + 2\ e^- \rightarrow$	$Pb(s)$		–0.126
$O_2(g) + 2\ H_2O + 2\ e^- \rightarrow$	$H_2O_2 + 2\ OH^-$		–0.146
$AgI(s) + e^- \rightarrow$	$Ag(s) + I^-$		–0.152
$Cu(OH)_2(s) + 2\ e^- \rightarrow$	$Cu(s) + 2\ OH^-$		–0.224
$Ni^{2+} + 2\ e^- \rightarrow$	$Ni(s)$		–0.23
$Co^{2+} + 2\ e^- \rightarrow$	$Co(s)$		–0.28
$PbSO_4(s) + 2\ e^- \rightarrow$	$Pb(s) + SO_4^{2-}$		–0.356
$Cd^{2+} + 2\ e^- \rightarrow$	$Cd(s)$		–0.403
$Cr^{3+} + e^- \rightarrow$	Cr^{2+}		–0.41
$Fe^{2+} + 2\ e^- \rightarrow$	$Fe(s)$		–0.44
$2\ CO_2 + 2\ H^+ + 2\ e^- \rightarrow$	$H_2C_2O_4$		–0.49
$S(s) + 2\ e^- \rightarrow$	S^{2-}		–0.508
$Ag_2S(s) + 2\ e^- \rightarrow$	$2\ Ag(s) + S^{2-}$		–0.705
$Ni(OH)_2(s) + 2\ e^- \rightarrow$	$Ni(s) + 2\ OH^-$		–0.72
$Cr^{3+} + 3\ e^- \rightarrow$	$Cr(s)$		–0.74
$Zn^{2+} + 2\ e^- \rightarrow$	$Zn(s)$		–0.763
$2\ H_2O + 2\ e^- \rightarrow$	$H_2(g) + 2\ OH^-$		–0.8277
$SO_4^{2-} + H_2O + 2\ e^- \rightarrow$	$SO_3^{2-} + 2\ OH^-$		–0.93
$Zn(NH_3)_4^{2+} + 2\ e^- \rightarrow$	$Zn(s) + 4\ NH_3$		–1.030
$Mn^{2+} + 2\ e^- \rightarrow$	$Mn(s)$		–1.18
$Cr(OH)_3(s) + 2\ e^- \rightarrow$	$Cr(s) + 2\ OH^-$		–1.3
$Ti^{2+} + 2\ e^- \rightarrow$	$Ti(s)$		–1.63
$Al^{3+} + 3\ e^- \rightarrow$	$Al(s)$		–1.662
$Mg^{2+} + 2\ e^- \rightarrow$	$Mg(s)$		–2.363
$Na^+ + e^- \rightarrow$	$Na(s)$		–2.714
$Ca^{2+} + 2\ e^- \rightarrow$	$Ca(s)$		–2.866
$Sr^{2+} + 2\ e^- \rightarrow$	$Sr(s)$		–2.89
$Ba^{2+} + 2\ e^- \rightarrow$	$Ba(s)$		–2.90
$Cs^+ + e^- \rightarrow$	$Cs(s)$		–2.92
$K^+ + e^- \rightarrow$	$K(s)$		–2.924
WEAKEST → $Li^+ + e^- \rightarrow$	$Li(s)$	**← STRONGEST**	–3.045
OXIDIZING AGENT **$+ n\ e^- \rightarrow$**		**REDUCING AGENT**	***E*° (Volts)**