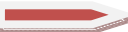

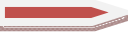




Activity Series of Metals - REFERENCE TABLE (not to be memorized)

Shows reactions of metals and their tendency to *lose electron(s)*. This is known as **OXIDATION of metals**.

	Lithium	$\text{Li} \longrightarrow \text{Li}^+ + \text{e}^-$
	Potassium	$\text{K} \longrightarrow \text{K}^+ + \text{e}^-$
	Barium	$\text{Ba} \longrightarrow \text{Ba}^{2+} + 2 \text{e}^-$
	Calcium	$\text{Ca} \longrightarrow \text{Ca}^{2+} + 2 \text{e}^-$
	Sodium	$\text{Na} \longrightarrow \text{Na}^+ + \text{e}^-$
	Magnesium	$\text{Mg} \longrightarrow \text{Mg}^{2+} + 2 \text{e}^-$
	Aluminum	$\text{Al} \longrightarrow \text{Al}^{3+} + 3 \text{e}^-$
	Manganese	$\text{Mn} \longrightarrow \text{Mn}^{2+} + 2 \text{e}^-$
	Zinc	$\text{Zn} \longrightarrow \text{Zn}^{2+} + 2 \text{e}^-$
	Chromium	$\text{Cr} \longrightarrow \text{Cr}^{3+} + 3 \text{e}^-$
	Iron	$\text{Fe} \longrightarrow \text{Fe}^{2+} + 2 \text{e}^-$
	Cobalt	$\text{Co} \longrightarrow \text{Co}^{2+} + 2 \text{e}^-$
	Nickel	$\text{Ni} \longrightarrow \text{Ni}^{2+} + 2 \text{e}^-$
	Tin	$\text{Sn} \longrightarrow \text{Sn}^{2+} + 2 \text{e}^-$
	Lead	$\text{Pb} \longrightarrow \text{Pb}^{2+} + 2 \text{e}^-$
	Hydrogen	$\text{H}_2 \longrightarrow 2 \text{H}^+ + 2 \text{e}^-$
	Copper	$\text{Cu} \longrightarrow \text{Cu}^{2+} + 2 \text{e}^-$
	Silver	$\text{Ag} \longrightarrow \text{Ag}^+ + \text{e}^-$
	Mercury	$\text{Hg} \longrightarrow \text{Hg}^{2+} + 2 \text{e}^-$
	Platinum	$\text{Pt} \longrightarrow \text{Pt}^{2+} + 2 \text{e}^-$
	Gold	$\text{Au} \longrightarrow \text{Au}^{3+} + 3 \text{e}^-$

Hydrogen gas

Very active metals
highest tendency
to lose electrons

Some
elements
on the left
side of the
Periodic
Table

Some
elements in
the middle
section of
the Periodic
Table

Less active metals
lowest tendency
to lose electrons

Note: Opposite of **OXIDATION** is **REDUCTION**, the tendency to *gain* electrons.

For example, the reduction of Li^+ ions is

