ACTIVITY SERIES OF METALS IN AQUEOUS SOLUTIONS

most active (easily oxidized – readily lose electrons)

lithium	Li
potassium	K
barium	Ba
calcium	Ca
sodium	Na

These metals displace hydrogen from water:

$$Ca_{(s)} + 2H_2O_{(l)} \rightarrow Ca(OH)_2 + H_{2\,(g)}$$

These elements are very reactive and react readily to form compounds

magnesium	Mg
aluminium	Al
zinc	Zn
chromium	Cr
iron	Fe
cadmium	Cd
nickel	Ni
tin	Sn
lead	Pb

These metals displace hydrogen from acids:

$$Zn_{(s)} + HCl_{(aq)} \rightarrow ZnCl_2 + H_{2\,(g)}$$

hydrogen	H

copper	Cu
silver	Ag
mercury	Hg
platinum	Pt
gold	Au

These metals do not displace hydrogen from acids or water.

These elements are more stable, and form compounds less readily than do those found higher in the table.

least active