

Activity Series of Elements

	Metal	Oxidation Reaction	
<div> <div>React vigorously with cold H₂O to form H₂</div> <div>↓</div> <div>React with steam to form H₂</div> <div>↓</div> <div>React with simple acids to form H₂</div> <div>↓</div> <div>Will not dissolve in simple acids</div> <div>↓</div> </div>	Lithium	Li → Li ⁺ + e ⁻	<div>↑</div> <div>Increasing ease of oxidation</div>
	Potassium	K → K ⁺ + e ⁻	
	Barium	Ba → Ba ²⁺ + 2e ⁻	
	Calcium	Ca → Ca ²⁺ + 2e ⁻	
	Sodium	Na → Na ⁺ + e ⁻	
	Magnesium	Mg → Mg ²⁺ + 2e ⁻	
	Aluminum	Al → Al ³⁺ + 3e ⁻	
	Manganese	Mn → Mn ²⁺ + 2e ⁻	
	Zinc	Zn → Zn ²⁺ + 2e ⁻	
	Chromium	Cr → Cr ³⁺ + 3e ⁻	
	Iron	Fe → Fe ²⁺ + 2e ⁻	
	Cadmium	Cd → Cd ²⁺ + 2e ⁻	
	Cobalt	Co → Co ²⁺ + 2e ⁻	
	Nickel	Ni → Ni ²⁺ + 2e ⁻	
	Tin	Sn → Sn ²⁺ + 2e ⁻	
	Lead	Pb → Pb ²⁺ + 2e ⁻	
	Hydrogen	H ₂ → 2H ⁺ + 2e ⁻	
	Copper	Cu → Cu ²⁺ + 2e ⁻	
	Silver	Ag → Ag ⁺ + e ⁻	
	Mercury	Hg → Hg ²⁺ + 2e ⁻	
	Platinum	Pt → Pt ²⁺ + 2e ⁻	
	Gold	Au → Au ⁺ + e ⁻	

Also note that the reactivity of halogens decreases as you go down the group because of increased shielding and lower electronegativity.

