The Reactivity Series for Metals

Metal	Reaction with Air	Reaction with Water		•	Reaction of metal's oxide			Reaction of heat and
		Cold	Steam	Reaction with Dilute acids	With hydrogen	With carbon	Solubility	hydroxides
Potassium	Burn readily to form oxide	Explosive, H ₂ evolved	Explosive, H ₂ evolved	Explosive, H ₂ evolved	No reaction	No reaction Reduced to metal, CO ₂ formed	Very soluble	No reaction
Sodium		Violent, H ₂ evolved						
Calcium		Quiet, H ₂ evolved	Violent, H ₂ evolved	Violent, H ₂ evolved			Slightly soluble	
Magnesium		No Reaction	Strong, H ₂ evolved	Strong, H ₂ evolved			Sparingly soluble	Decomposed by heat to form oxides
Aluminum			Quiet, H ₂ evolved	Normal, H ₂ evolved			Insoluble	
Zinc	Forms oxide when heated Reversible reaction							
Iron			Reversible reaction		Reversible Reaction			
Tin			No Reaction	Weak, H ₂ evolved	Reduced to metal, water formed			
Lead								
Copper				No Reaction				
Mercury					Oxides reduced to metal by heat	Oxides reduced to metal by heat		Unstable or not formed
Silver	No reaction							
Gold								