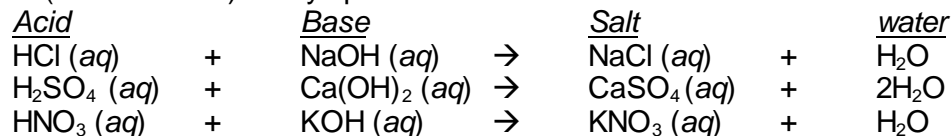


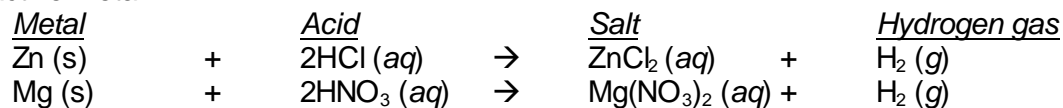
Properties of Acids and Bases

	Acids	Bases	
<p><u>Examples of acids:</u></p> <p><i>Monoprotic acids</i> HNO₃ – nitric acid HCl – hydrochloric acid HC₂H₃O₂ – acetic acid</p> <p><i>Diprotic acid</i> H₂SO₄ – sulfuric acid</p> <p><i>Triprotic acid</i> H₃PO₄ – phosphoric acid</p>	Taste sour	Taste Bitter	<p><u>Examples of bases:</u></p> <p>LiOH NaOH KOH Mg(OH)₂ Ca(OH)₂ NH₄OH</p>
	pH less than 7	pH greater than 7	
	Acids effect indicators: 1. Acids turn blue litmus to red 2. Acids turn methyl orange to red	Bases effect indicators: 1. Bases turn red litmus to blue 2. Bases turn methyl orange to yellow 3. Bases turn phenolphthalein to purple	
	Acids neutralize bases producing a salt and water	Bases neutralize acids producing a salt and water	
	Proton donors (Proton = H ⁺ = hydrogen ion)	Proton acceptors (Proton = H ⁺ = hydrogen ion)	
	Increase H ⁺ ion concentration in solution	Increase OH ⁻ ion concentration in solution	
	Acids are electrolytes	Bases are electrolytes	
	Acids react with carbonates to produce a salt, water and CO ₂	Bases feel slippery	
	Acids react with active metals to produce hydrogen		

Reaction of an acid with a base (neutralization) always produces a salt and water:



Reaction of an acid with an active metal:



Reaction of an acid with a carbonate:

