

Model	Acid definition	Base definition
Arrhenius		
Bronsted-Lowry		
Lewis		

OH<sup>-</sup> producer                      electron-pair donor                      H<sup>+</sup> donor  
 H<sup>+</sup> producer                          H<sup>+</sup> acceptor                                  electron-pair acceptor

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Reaction	Lewis acid	Lewis base
$\text{H}^+ + \text{OH}^- \rightleftharpoons \text{H}_2\text{O}$		
$\text{Cl}^- + \text{BCl}_3 \rightleftharpoons \text{BCl}_4^-$		
$\text{SO}_3 + \text{H}_2\text{O} \rightleftharpoons \text{H}_2\text{SO}_4$		

H<sup>+</sup>                      Cl<sup>-</sup>                      OH<sup>-</sup>                      BCl<sub>3</sub>                      H<sub>2</sub>O                      SO<sub>3</sub>