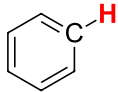
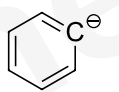
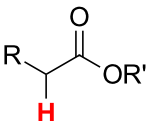
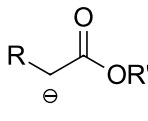
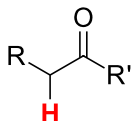
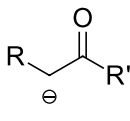
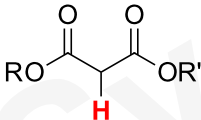
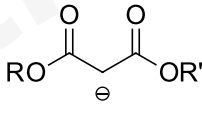
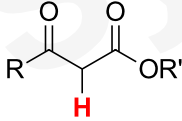
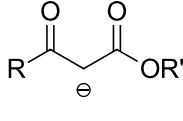
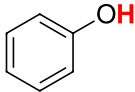
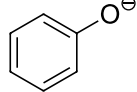
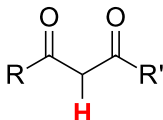
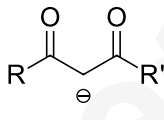
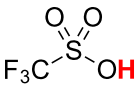
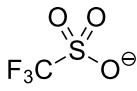


Functional Group	Acid	Conjugate Base	pK _a
Alkanes	$\text{R}-\text{CH}_3$	$\text{R}-\text{CH}_2^-$	~50
Alkenes	$\text{R}-\text{C}(\text{H})=\text{C}-\text{R}$	$\text{R}-\text{C}(\text{R})=\text{C}^-$	~43
Benzene Derivatives			~43
Amines	$\text{R}-\text{NH}_2$	$\text{R}-\text{NH}^-$	~38
Hydrogen	H_2	H^-	~35
Alkynes	$\text{R}-\text{C}\equiv\text{C}-\text{H}$	$\text{R}-\text{C}\equiv\text{C}^-$	~25
α-H of Carboxylic Acid Derivatives (Acid, Ester, etc)			~25
α-H of Aldehydes and Ketones			~20
Alcohols	$\text{R}-\text{OH}$	$\text{R}-\text{O}^-$	~16
Water	H_2O	OH^-	15.7
α-H of 1,3-Diesters			~13
α-H of β-Keto Esters			~11
Phenol			10
Ammonium Ions	$\text{R}-\text{NH}_3^+$	$\text{R}-\text{NH}_2$	~10
α-H of 1,3-Diketones			~9
Carboxylic Acids	$\text{R}-\text{COOH}$	$\text{R}-\text{COO}^-$	~5
Hydrofluoric Acid	HF	F^-	3.2
Hydronium Ion	H_3O^+	H_2O	-1.7
Hydrochloric Acid	HCl	Cl^-	-7
Hydrobromic Acid	HBr	Br^-	-9
Hydroiodic Acid	HI	I^-	-10
Triflic Acid			-14

Weak Acid

Strong Base

Strong Acid

Weak Base