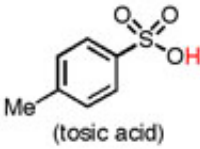
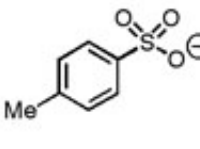
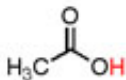
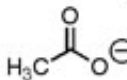


A pKa table is a handy guide to leaving groups

Functional group / Example	pKa	Conjugate base	
Hydroiodic acid <chem>HI</chem>	-10	<chem>I</chem> [⊖]	Excellent leaving groups (extremely weak bases)
Hydrobromic acid <chem>HBr</chem>	-9	<chem>Br</chem> [⊖]	
Hydrochloric acid <chem>HCl</chem>	-8	<chem>Cl</chem> [⊖]	
Sulfuric acid <chem>H2SO4</chem>	-3	<chem>HSO4</chem> [⊖]	
Sulfonic acids  (tosic acid)	-3		
Hydronium ion <chem>H3O</chem> [⊕]	-1.7	<chem>H2O</chem>	
Hydrofluoric acid <chem>H-F</chem>	3.2	<chem>F</chem> [⊖]	Exception: <chem>F</chem> [⊖] is typically a poor leaving group (forms strong bonds)
Carboxylic acids 	4		Moderate leaving groups (weak bases)
Protonated amines <chem>NH4</chem> [⊕] <chem>Cl</chem> [⊖]	9-11	<chem>NH3</chem>	
Water <chem>HO-H</chem>	16	<chem>HO</chem> [⊖]	Poor leaving groups (strong bases)
Alcohols <chem>CH3O-H</chem>	16-18	<chem>CH3O</chem> [⊖]	
Amine <chem>NH3</chem>	~35	<chem>NH2</chem> [⊖]	Extremely poor leaving groups (very strong bases)
Hydrogen <chem>H-H</chem>	42	<chem>H</chem> [⊖]	
Alkane 	~50	