


California State Polytechnic University, Pomona
Organic Chemistry I, CHM 3140, L. S. Starkey

	<u>Functional Group</u>	<u>Example</u>	<u>Abbreviation</u>	<u>Name</u>
CHM 3140	alkane	CH ₄	RH	methane
	alkyl halide	CH ₃ Cl	RX or RCl	chloromethane (methyl chloride)
	alkene	H ₂ C=CH ₂	R ₂ CCR ₂	ethene (ethylene)
	alkyne	HC≡CH	RCCR	ethyne (acetylene)
CHM 3150	alcohol	CH ₃ OH	ROH	methanol (methyl alcohol)
	ether	CH ₃ OCH ₃	ROR or R ₂ O	methoxymethane (dimethyl ether)
	amine	CH ₃ NH ₂	R ₃ N	methanamine (methyl amine)
	aldehyde	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3-\text{C}-\text{H} \end{array}$	RCHO	ethanal (acetaldehyde)
	ketone	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3-\text{C}-\text{CH}_3 \end{array}$	RCOR or R ₂ CO	2-propanone (acetone)
	carboxylic acid	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3-\text{C}-\text{OH} \end{array}$	RCO ₂ H	ethanoic acid (acetic acid)
	acid chloride (acyl halide)	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3-\text{C}-\text{Cl} \end{array}$	RCOCl	ethanoyl chloride (acetyl chloride)
	ester	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3-\text{C}-\text{OCH}_3 \end{array}$	RCO ₂ R	methyl ethanoate (methyl acetate)
	amide	$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3-\text{C}-\text{NH}_2 \end{array}$	RCONR ₂	ethanamide (acetamide)
	anhydride	$\begin{array}{c} \text{O} \quad \text{O} \\ \parallel \quad \parallel \\ \text{CH}_3-\text{C}-\text{O}-\text{C}-\text{CH}_3 \end{array}$	RCO ₂ COR or (RCO) ₂ O	ethanoic anhydride (acetic anhydride)
	nitrile	CH ₃ CN	RCN	ethanenitrile (acetonitrile)
	aromatic		ArH	benzene