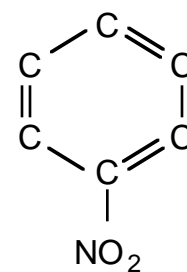
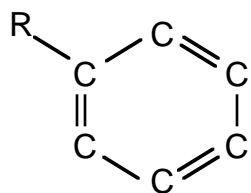


## Common Functional Groups : Notes - 80

Many organic compounds have a structure that includes one of the functional groups shown below. The R and R' represent alkane groups such as methyl and ethyl. Most hydrogen atoms are not shown for clarity.

<u>Group Name</u>	<u>General Structure</u>	<u>Example</u>
alcohol	$R-O-H$	$C-C-O-H$ ethanol
ether	$R-O-R'$	$C-O-C-C$ methoxyethane
aldehyde	$\begin{array}{c} O \\    \\ R-C-H \end{array}$	$\begin{array}{c} O \\    \\ C-C-H \end{array}$ ethanal
ketone	$\begin{array}{c} O \\    \\ R-C-R' \end{array}$	$\begin{array}{c} O \\    \\ C-C-C \end{array}$ propanone
carboxylic acid	$\begin{array}{c} O \\    \\ R-C-O-H \end{array}$	$\begin{array}{c} O \\    \\ C-C-O-H \end{array}$ ethanoic acid
ester	$\begin{array}{c} O \\    \\ R-O-C-R' \end{array}$	$\begin{array}{c} O \\    \\ C-O-C-C-C \end{array}$ methyl propanoate

aromatic



Nitrobenzene

Note: Aromatic compounds contain at least one benzene ring. Many groups may be attached to the ring. The ring is usually represented by a hexagon with a circle inside as shown below.

