C11 - 6.5 - Amines/Amides/Carboxylic Acids/Esters/Ethers Notes

Amines: an Organic Compound with NH₂ attached

Naming: amino 'ethane'

aminopropane

1,3 - diaminopropane

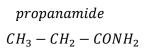
 $CH_3 - CH_2 - CH_2 - NH_2$ $NH_2 - CH_2 - CH_2 - CH_2 - NH_2$

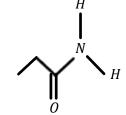
 $CH_3 - CH - CH_2 - CH_3$

2 – aminobutane NH_2

Amides: an Organic Compound with $CONH_2$ attached

Naming: $abe \rightarrow amide$

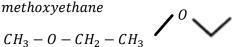




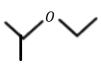
Ethers: an Organic Compound with an'O' attached to two hydrocarbon groups

Naming: Smaller # side prefix 'oxy' Larger # Side ethane

methoxyethane



$$2-ethoxypropane \\ CH_3-CH_2-CH_2-O-CH_2-CH_3$$

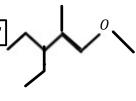


"methyl ethyl ether"

3 - ethyl - 1 - methoxy - 2 methylpentane?

$$CH_3 \\ | \\ CH_3 - O - CH_2 - CH - CH - CH_3$$

Count away from the 'Group"



Esters: an Organic Compound with an COO attached to two hydrocarbon chains

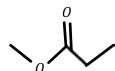
Naming: Smaller # side ethyl, Larger # Side (inc C in COO)ethane $e \rightarrow oate$

methyl propanoate

ethyl pentanoate

ether + keytone

 $CH_3 - CH_2 - CH_2 - COO - CH_3$



$$CH_3 - CH_2 - CH_2 - CH_2 - COO - CH_2 - CH_3$$

