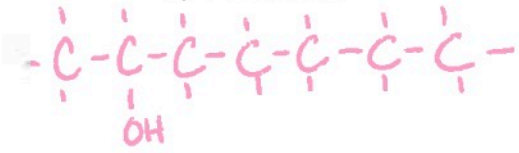
KEY

NAMING AND DRAWING FUNCTIONAL GROUPS PRACTICE WORKSHEET
Chemistry 11

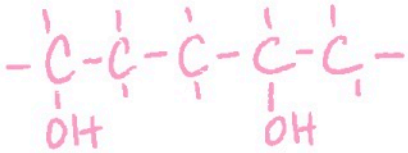
1. Draw the following alcohols

a) 2-heptanol

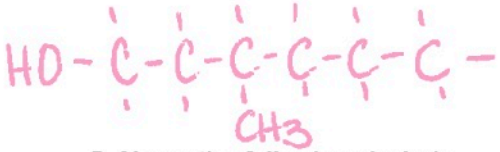


c) cyclopropanol

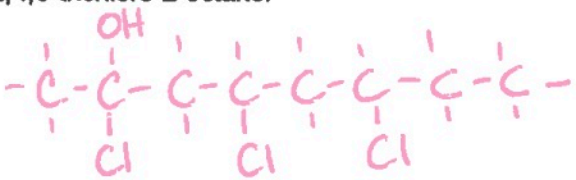
e) 1,4-pentadiol



b) 3-methyl-1-hexanol

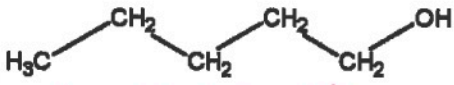


d) 2,4,6-trichloro-2-octanol



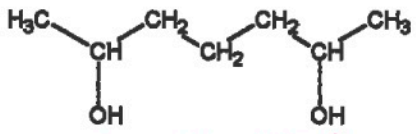
2. Name the following alcohols

a)



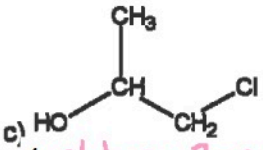
1-pentanol

b)



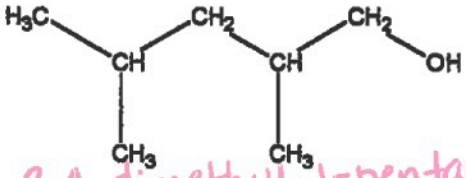
2,6-heptadiol

c)



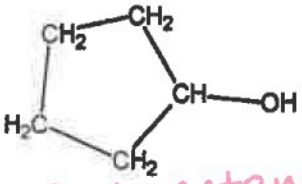
1-chloro-2-propanol

d)



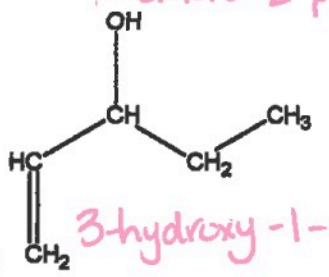
2,4-dimethyl-1-pentanol

e)



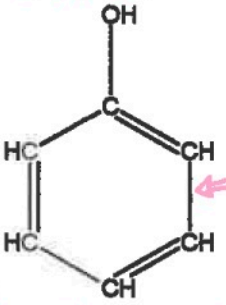
cyclopentanol

f)



3-hydroxy-1-pentene

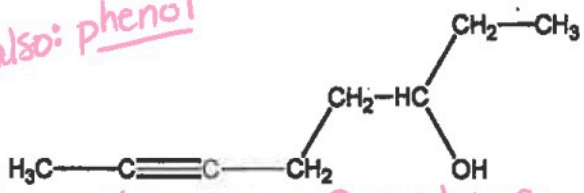
g)



also: phenol

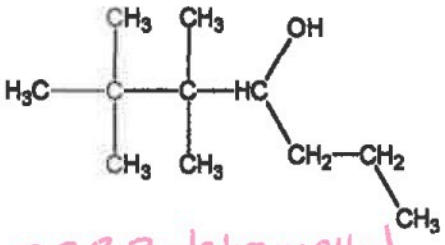
hydroxybenzene

h)



6-hydroxy-2-octyne

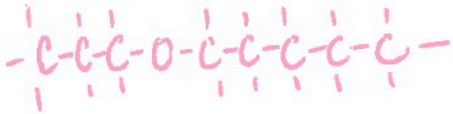
i)



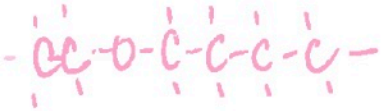
2,2,3,3-tetramethyl-4-heptanol

4. Draw the following ethers

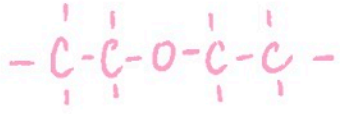
a) propoxypentane



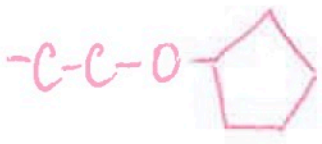
b) ethoxybutane



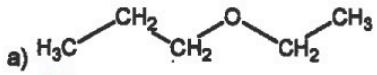
c) diethylether



d) ethoxycyclopentane



5. Name the following ethers

a) 

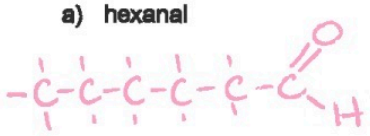
ethoxypropane

b) $CH_3CH_2CH_2CH_2-O-CH_2CH_2CH_2CH_2CH_3$

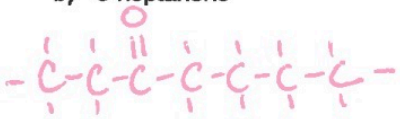
butoxypentane

7. Draw the following aldehydes and ketones

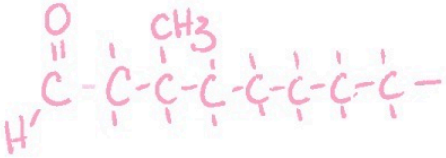
a) hexanal



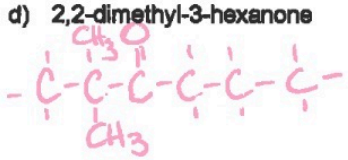
b) 3-heptanone



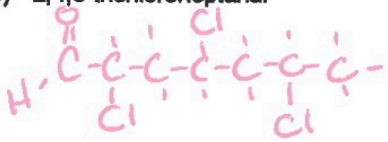
c) 3-methyloctanal



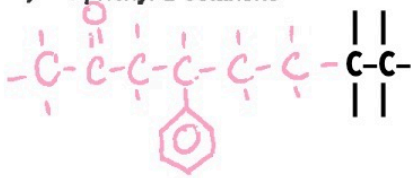
d) 2,2-dimethyl-3-hexanone



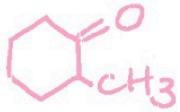
e) 2,4,6-trichloroheptanal



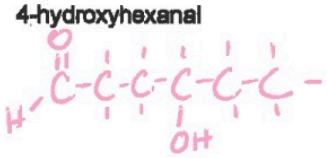
f) 4-phenyl-2-octanone



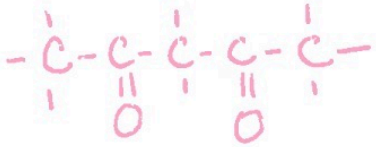
g) 2-methylcyclohexanone



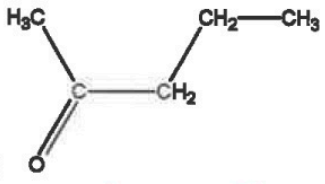
h) 4-hydroxyhexanal



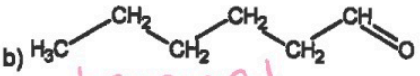
i) 2,4-pentadione



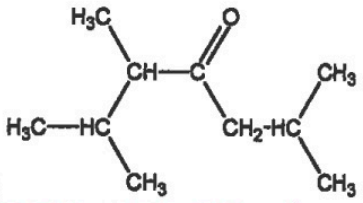
8. Name the following aldehydes and ketones

a) 

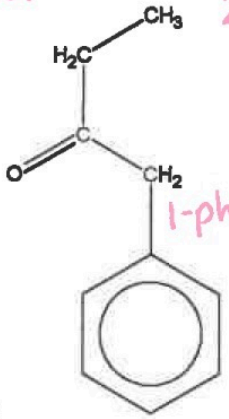
2-pentanone

b) 

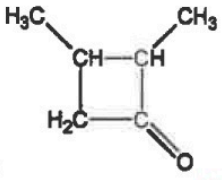
hexanal

c) 

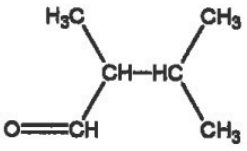
2,3,6-trimethyl-4-heptanone



1-phenyl-2-butanone

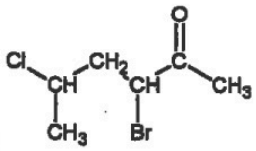
d) 

2,3-dimethyl cyclobutanone

e) 

2,3-dimethyl butanal

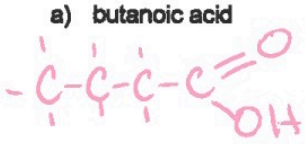
f)

g) 

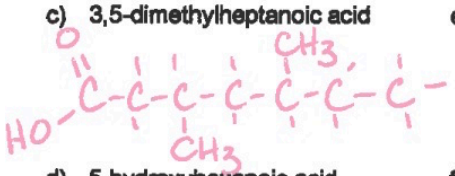
3-bromo-5-chloro-2-hexanone

11. Draw the following carboxylic acids

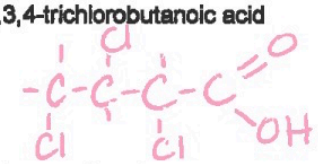
a) butanoic acid



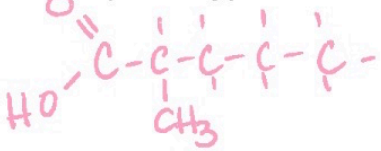
c) 3,5-dimethylheptanoic acid



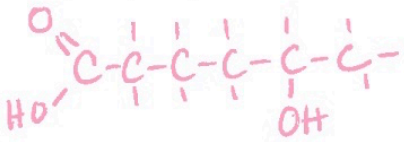
e) 2,3,4-trichlorobutanoic acid



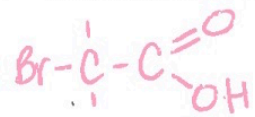
b) 2-methylpentanoic acid



d) 5-hydroxyhexanoic acid

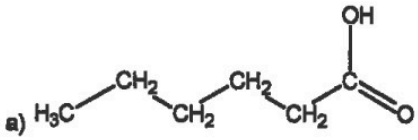


f) 2-bromoethanoic acid



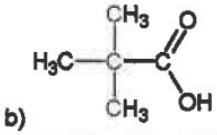
12. Name the following carboxylic acids

a)



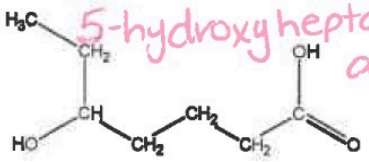
hexanoic acid

b)



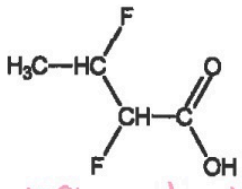
2,2-dimethyl propanoic acid

c)



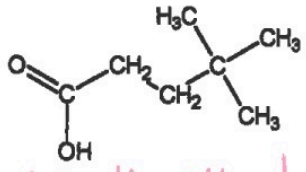
5-hydroxyheptanoic acid

d)



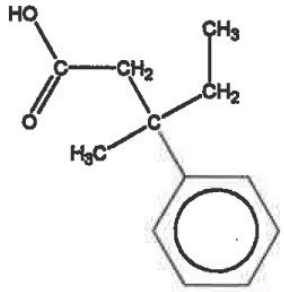
2,3-difluorobutanoic acid

e)



4,4-dimethyl pentanoic acid

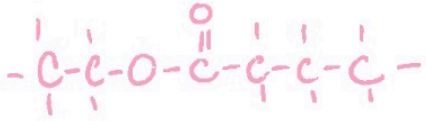
f)



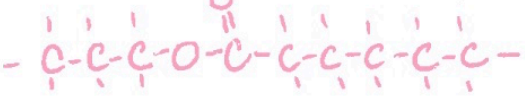
3-methyl-3-phenyl pentanoic acid

14. Draw the following esters

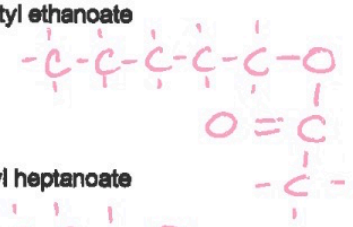
a) ethyl butanoate



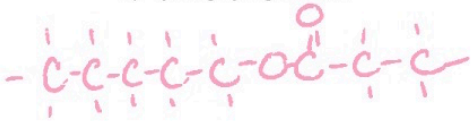
c) propyl hexanoate



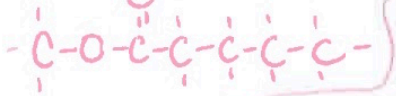
e) pentyl ethanoate



b) pentyl propanoate



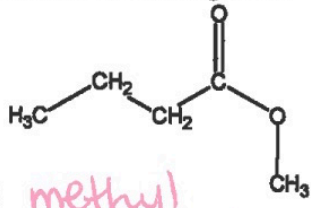
d) methyl pentanoate



f) butyl heptanoate

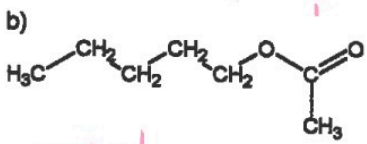
15. Name the following esters

a)



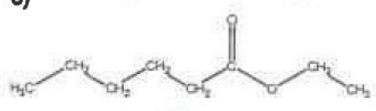
methyl butanoate

b)



pentyl ethanoate

c)



ethyl hexanoate