

CHEMISTRY 104 – Practice Sheet #3

Organic: Identifying Functional Groups; Naming Molecules

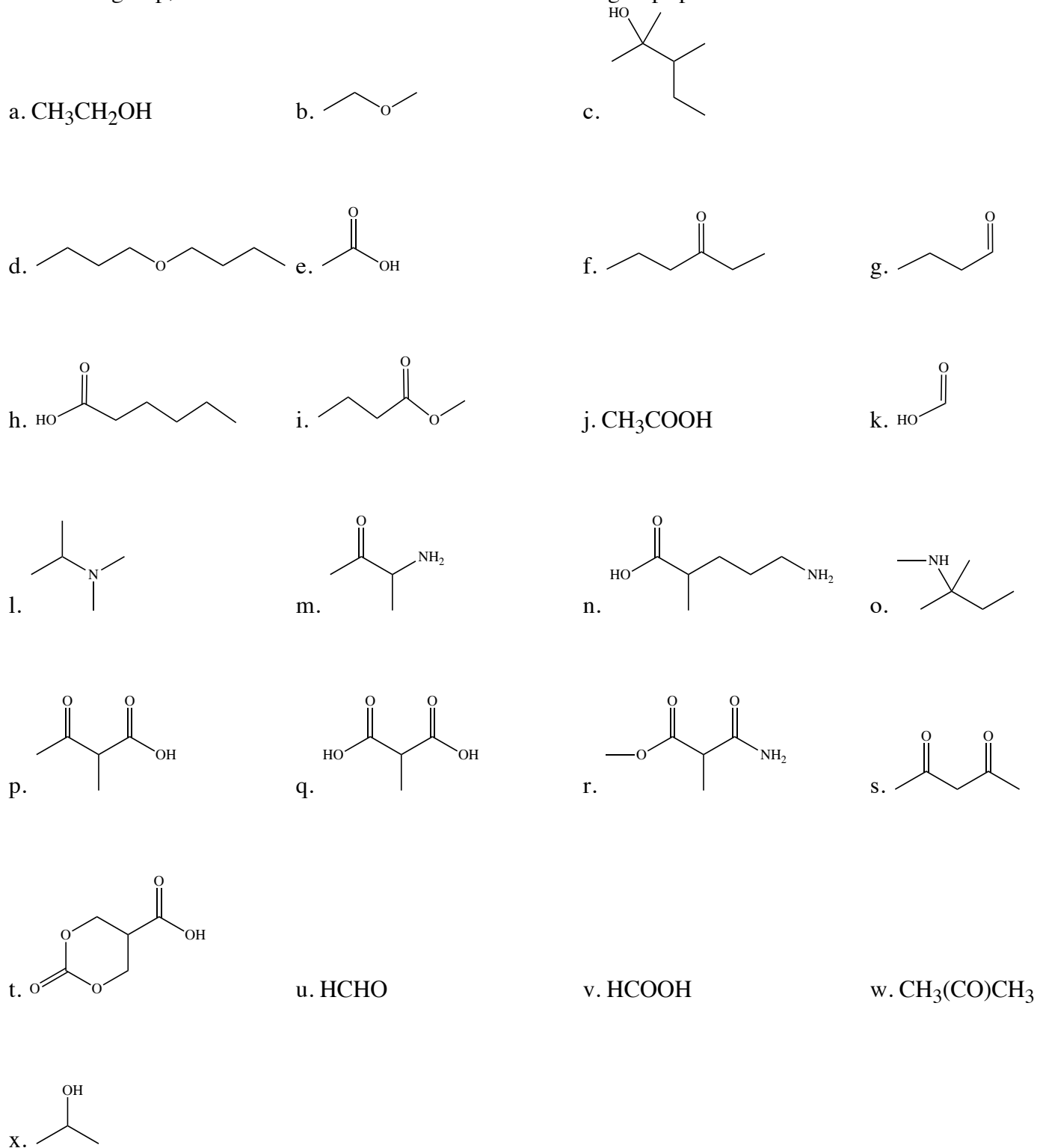
Functional groups: alcohol, ether, aldehyde, ketone, carboxylic acid, ester, amide, and amine.

Do the topics appropriate for your lecture

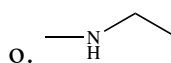
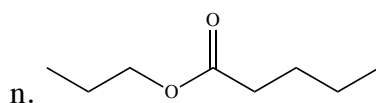
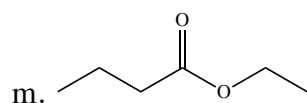
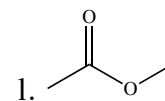
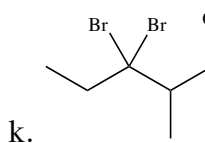
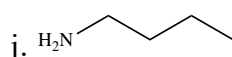
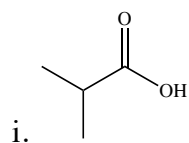
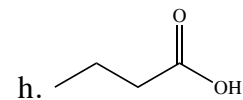
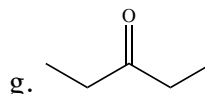
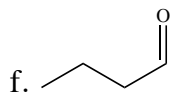
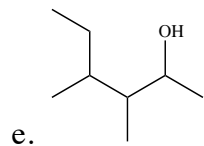
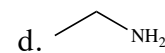
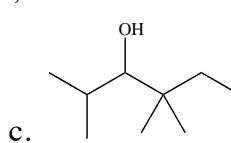
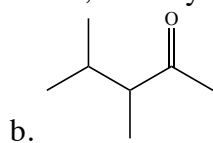
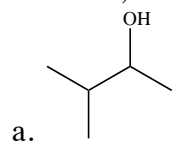
Prepared by Dr. Tony Jacob

<http://www.chem.wisc.edu/areas/clc> (Resource page)

1. For each molecule circle and name the functional group. Some molecules will have more than one functional group; in those cases circle and name all functional groups present.



2. Write the names for the chemicals shown below; these chemicals include the following functional groups: alcohols, ethers, aldehydes, ketones, carboxylic acids, esters, and amines.



3. Draw the organic structures using line notation given the names below; these chemicals include the functional groups: alcohols, ethers, aldehydes, ketones, carboxylic acids, and esters.

a. 3,3,4-trimethyl-2-pentanol

b. dimethylether

c. 2,4,6-trichloro-3-hexanol

d. 3-methyl-2-butanol

e. 2,3-dimethyl-1-butanal

f. 3-ethyl-4,4-dimethyl-2-pentanone

g. 2,3,4-trimethyl-1-pentanoic acid

h. 2,2,3,3-tetrachloro-1-propanal

i. 1,3-dibromo-2-pentanone

j. 1-propanoic acid

k. ethylmethylpropylamine

l. methylethanoate

m. ethylamine

n. propylbutanoate

o. ethylhexanoate

ANSWERS

