FUNCTIONAL GROUP IDENTIFICATION WORKSHEET

1. Identify the functional groups on the following organic molecules.

a.

H

b. H

H O

C C

H OH

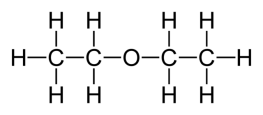
O H H

C C

C C

H O H

H H H

c.

1. H

OH H H

H C C C C H

H H H H

1. H H H

C C C C

Br H

H

H H H H

1. Draw simple organic molecules that contain the following functional groups.
2. Cycloalkane
3. Amine
4. Ether
5. Ester
6. Aldehyde
7. Identify the functional group in each of the following molecules.
   1. O
   2. O

NH

* 1. O



* 1. O O

Ph O Ph

e.

O

f. O

Br

1. Draw simple molecules that contain the following functional groups. Draw as skeleton structures, as shown above – do not draw carbons, but only lines to represent bonds between them. Do not draw hydrogens if they are attached to a carbon atom.
   1. Carboxylic Acid
   2. Halide (Haloalkane)
   3. Ester
   4. Amine
   5. Ketone
   6. Aldehyde
   7. Primary Thiol
   8. Amide
   9. Tertiary Alcohol
   10. Secondary amine