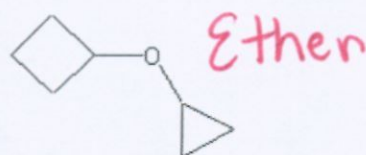
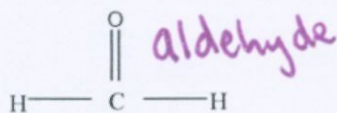
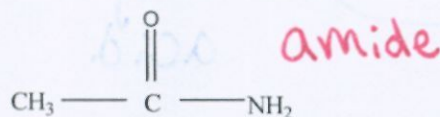
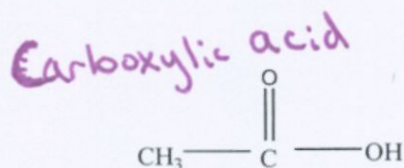
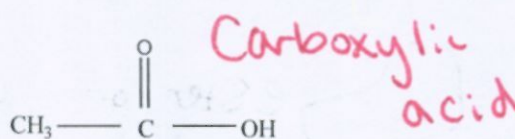
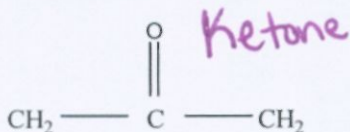
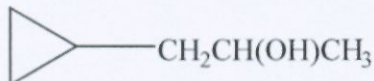


Worksheet 9: Functional Groups

1. What functional groups are present in each molecule below?

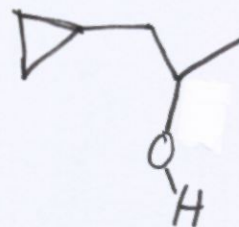


6. The alcohol below is classified as which of the following?

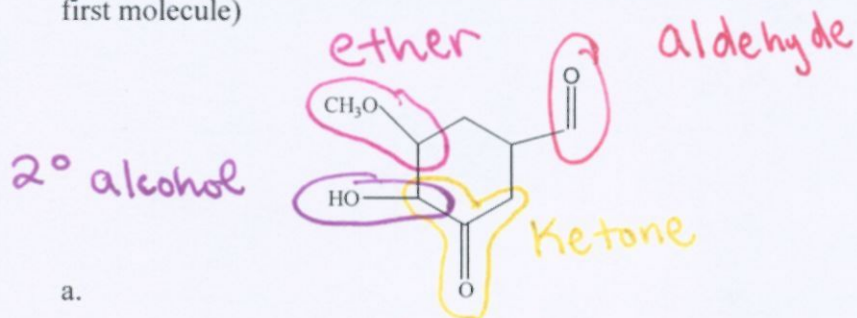


- a. primary alcohol
- b. secondary alcohol

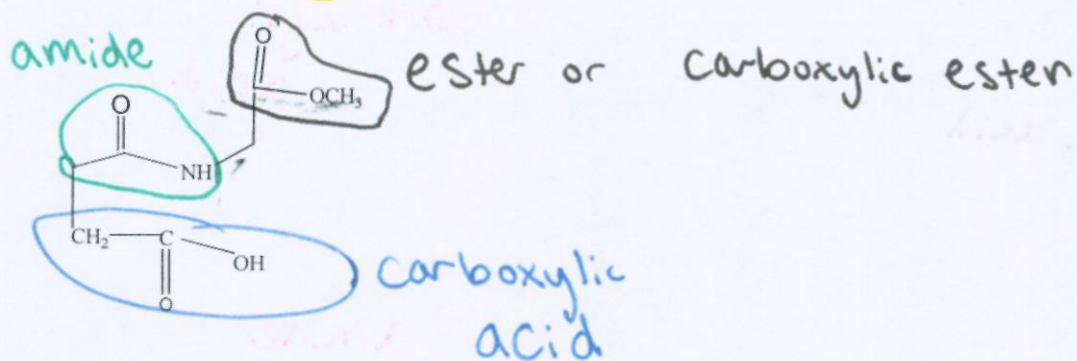
- c. tertiary alcohol
- d. aromatic alcohol



Circle and name the functional groups in the following molecules (not including cyclic Carbon ring in first molecule)

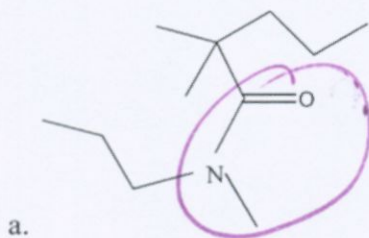


a.



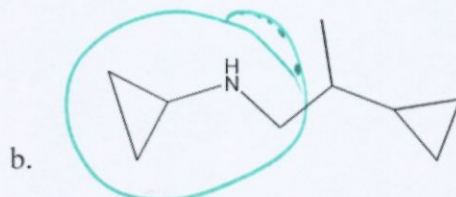
b.

3. How many functional groups and **different** hydrocarbons can you spot in each molecule?



1 Kind of hydrocarbon
-alkane

1 functional group
-amide

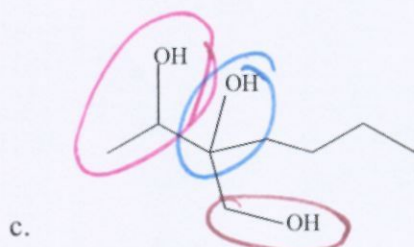


1 functional group

-Secondary (2°) amine

1 kind of hydrocarbon
-alkane

-more specifically
there are 2 cyclopropane
groups



• 3 Functional groups

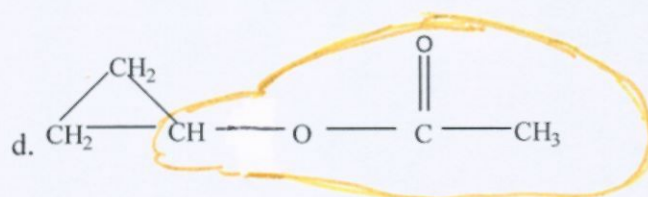
• primary (1°) alcohol

• tertiary (3°) alcohol

• Secondary (2°) alcohol

• 1 hydrocarbons

-alkane

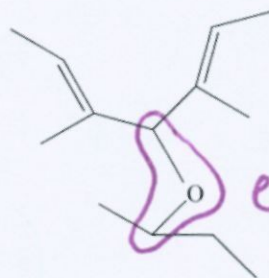


• Ester

Hydrocarbons

• alkanes

• a cyclopropane
group



f.

1 functional group
- ether

Hydrocarbons present

- alkanes
- 2 sets of alkenes