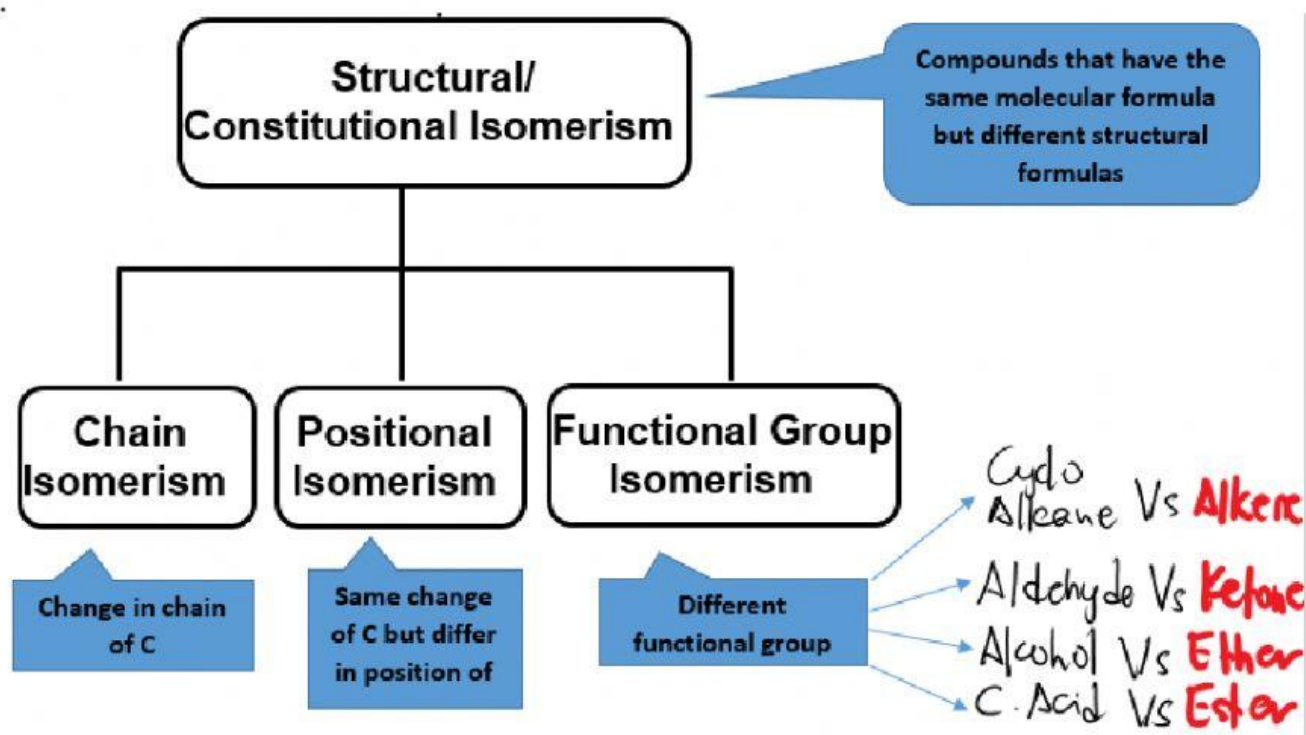
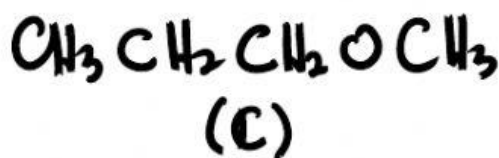
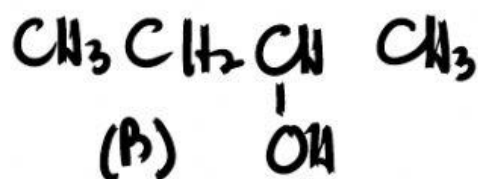
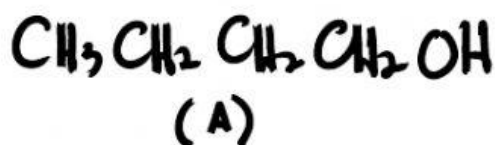


Exercise 1: Isomerism

1. The compounds below show the possible isomers of $C_4H_{10}O$.

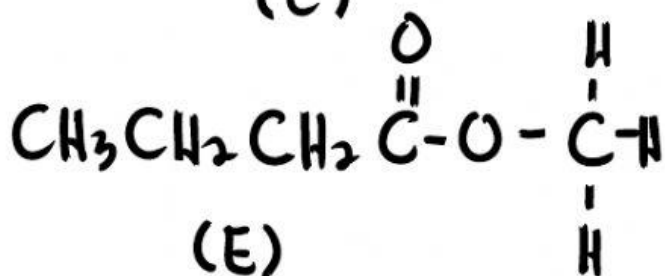
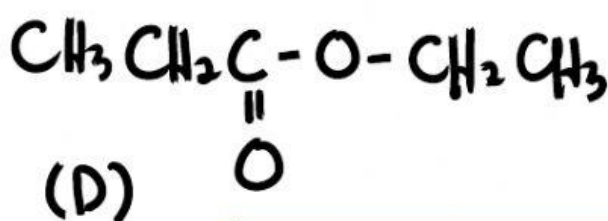
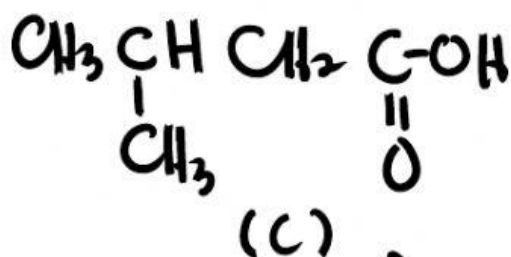
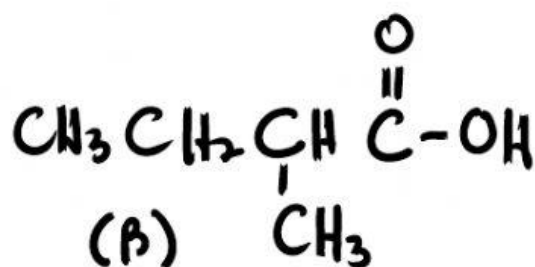
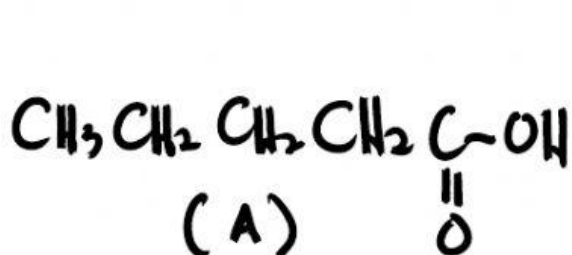


(a) Select which isomers are chain isomers A and _____ or
B and _____

(b) Select which isomers are positional isomers. _____ and _____

(c) Select which isomers are functional isomers. A and _____ or
B and _____ or
D and _____

2. The compounds below show the possible isomers of $C_5H_{10}O_2$.



Change the **position of the functional group** but retain the C chain

- a) Select which isomers are chain isomers A and _____
- b) Select which isomers are positional isomers. _____ and _____
- c) Select which isomers are functional isomers. A and _____ or

B and _____ or

C and _____ or

A and _____ or

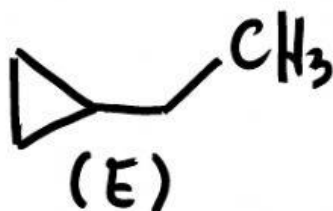
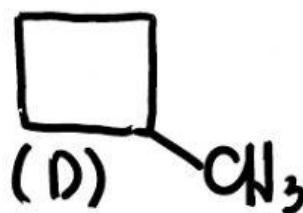
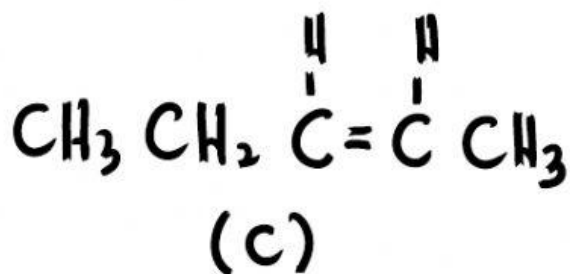
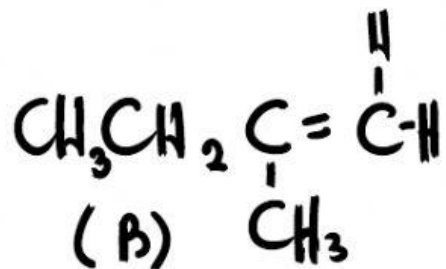
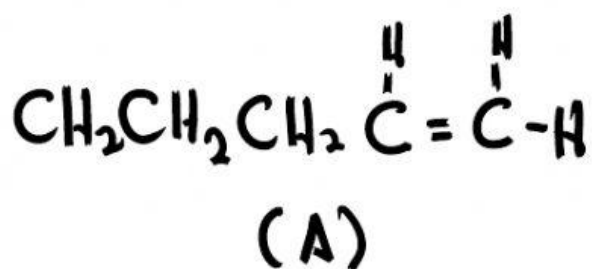
B and _____ or

C and _____

Functional group isomers:
Compare different functional groups

Any carboxylic acids
vs
Any Ester

3. The compounds below show the possible isomers of C_5H_{10}



d) Select which isomers are chain isomers

A and _____ or

C and _____ or

D and _____

e) Select which isomers are positional isomers. _____ and _____

f) Select which isomers are functional isomers. A and _____ or

B and _____ or

C and _____ or

A and _____ or

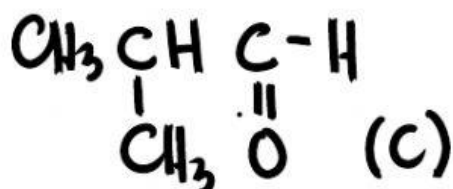
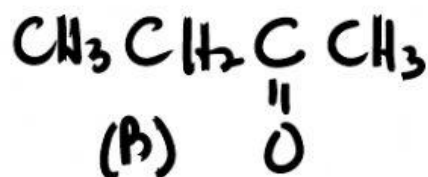
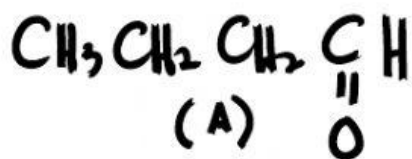
B and _____ or

C and _____

Functional Group Isomers:
Always compare different
functional groups

Any Cycloalkanes
Vs
Any Alkenes

4. The compounds below show the possible isomers of C_4H_8O .



g) Select which isomers are chain isomers _____ and _____

h) Select which isomers are functional isomers. A and _____ or

A and _____ or

C and _____ or

C and _____

There are no
positional
isomers for
 C_4H_8O ???



Position for Carbonyl
functional group for
Aldehyde always be at
the 1st Carbon

