

Organic Acids—contain the functional group _____.

Their general formula is _____. They are weak acids.

Many organic acids contain the functional group Carboxyl-
-COOH

Acids are named by dropping the final -e of the parent hydrocarbon and replacing it with -oic and adding the name acid.

- a) The 1st member of the organic acid group has the formula HCOOH and is called _____ acid or _____ acid.

Its structural formula is:

- b) The 2nd member is CH₃COOH also written as HC₂H₃O₂. This acid is called _____ acid or _____ acid, and is also found in your kitchen and known as _____.

Its structural formula is:

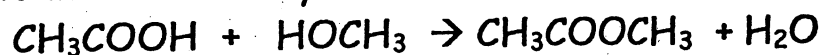
Draw and name the next member of the series below.

D. Esters - organic compounds formed by an esterification reaction between an organic acid and an alcohol.

a) Esters have characteristic sweet smells and are used for artificial flavors.

b) The esters have the general formula: _____

c) One esterification reaction could be the reaction between acetic acid and methyl alcohol as shown below:



d) The name of the ester above is _____ or _____

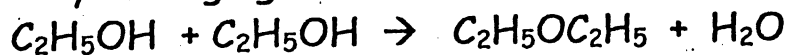
E. Aldehydes - have the general formula: _____

a) The 1st member of the aldehyde family is HCHO, which is commonly called _____. Its IUPAC name would be _____. Its structural formula is:

F. Ketones - have the general formula: _____

a) The simplest member of the ketone family is CH₃COCH₃. It is commonly called _____. Its IUPAC name is _____ and its structure is:

G. Ethers - are formed when 2 primary alcohols are treated with a dehydrating agent and water is removed as shown:



a) The general formula for the ethers is _____. It is an organic oxide.

b) The structural formula of the ether in the equation above is: