

# Ketones

## Ketones

- A ketone is a hydrocarbon derivative that contains a **carbonyl** functional group **anywhere** on the base chain.

## IUPAC Names

5C- pentan-1-one  
4C- butan-1-one

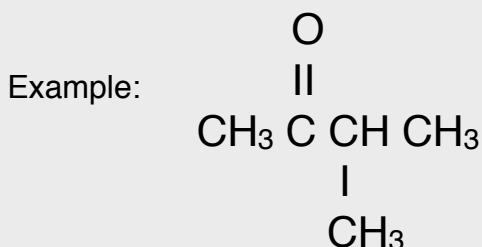
9 C- nonan-1-one  
10 C- decan-1-one

- The general formula for the series is



## Naming Ketones

- Identify the base number of carbons.
  - The base is the longest continuous chain of carbons that contains the carbonyl group.
  - Use the number of carbons as a prefix before the suffix **-one**
- Identify the location of the carbonyl group by assigning a number directly in front of the -one suffix. This numbering will take precedence for being given the lowest number over any other side chain.
- Name any additional side chains and identify their positions using numbers.



Answer: 3-methylbutan-2-one

## Drawing Ketones

- Start by drawing the base chain. Draw the number of carbons as indicated by the prefix.
- Add the carbonyl group to the appropriate carbon.
- Add any indicated double or triple bonds.
- Add any indicated side chains.
- Saturate the remaining carbons

Example: 2-methylpentan-3-one

