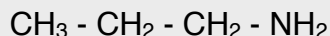


Amines

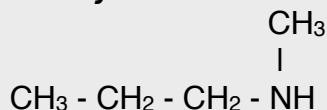
Amines

- An amine is a hydrocarbon derivative that contains a **nitrogen** atom bonded to at least one carbon atom.

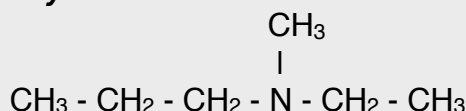
Primary amine



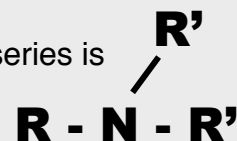
Secondary amine



Tertiary amine



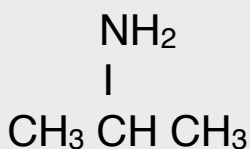
- The general formula for the series is



Naming Amines

- Identify the base number of carbons.
 - The **longest** carbon chain attached to the **nitrogen** is the base chain.
 - Use the number of carbons as a prefix before the suffix **-amine**.
- Number the carbons so that the carbon in the base chain attached to the nitrogen has the smallest number.
 - Use a number and a dash directly in front of the -amide suffix to identify the location of the N.
- For secondary and tertiary alkanes, use N- to precede each additional carbon chain. Name these as you would a alkyl side chain and place them in alphabetical order.

Example:



Answer: propan-2-amine

Drawing Amines

- Start by drawing the base chain, the longest carbon chain attached to the nitrogen. Draw the number of carbons as indicated by the prefix.
- Add any additional side chains to the base chain as indicated.
- Add any additional R' group to the single bonded nitrogen.
- Saturate the remaining carbons

Example: 2-methylbutan-1-amine

