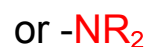




## CHEMISTRY

## AMINES

An organic compound with the functional group:



is called an **amine**. Amines can be thought of as derivatives of the ammonia molecule,  $NH_3$ .

### How to Name an Amine

**Step 1:** Identify the largest hydrocarbon group attached to the nitrogen atom as the parent alkane.

**Step 2:** Replace the -e at the end of the name of the parent alkane with the new ending -amine. Include a position number, if necessary, to show the location of the functional group on the hydrocarbon chain.

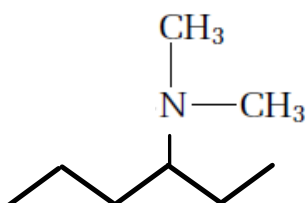
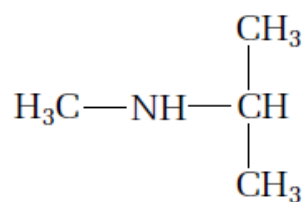
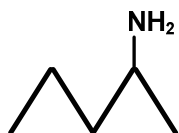
**Step 3:** Name the other alkyl group(s) attached to the nitrogen atom. Instead of position numbers, use the letter N- to locate the group(s). (If two identical alkyl groups are attached to the nitrogen atom, use N,N-.) This is the prefix.

**Step 4:** Put the name together: prefix + root + suffix.



## CHEMISTRY

## AMINES

Naming Amines

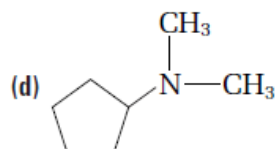
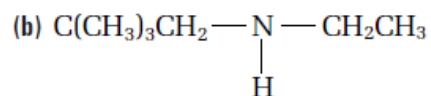
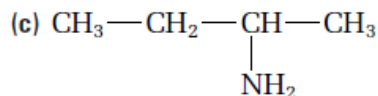
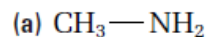
**CHEMISTRY****AMINES**Drawing Amines**ethanamine****5-ethoxy-N-methyl-2-hexanamine****N-isopropyl-N-secbutyl-pent-4-en-2-amine**



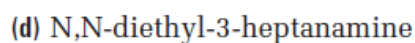
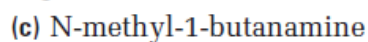
# CHEMISTRY

## WORKSHEET - AMINES

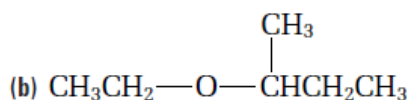
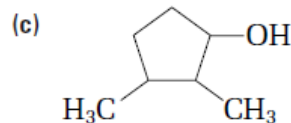
Name each amine.



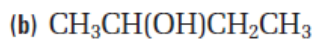
Draw a condensed structural diagram for each amine.



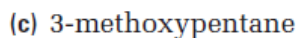
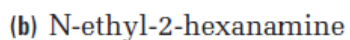
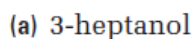
**1** **K/U** Name each compound.



**2** **K/U** Write the IUPAC name for each compound.



**3** **C** Draw a condensed structural diagram for each compound.




**CHEMISTRY**
**WORKSHEET - AMINES**

Name: \_\_\_\_\_

**AMINES AND AMIDES**

1. Name the following.

|  |  |
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|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**CHEMISTRY****WORKSHEET - AMINES**

2. Draw the following.

|                                       |                                   |
|---------------------------------------|-----------------------------------|
| N-ethyl-N-phenylpropanamine           | N-chloro-pent-2-ynamine           |
| N,N-diethyl-2-fluorohept-2-en-3-amine | N-phenyl-2-pentanamine            |
| N-methyl-3-hydroxyhexanamide          | N-ethyl-N-propylhept-1-en-3-amine |
| N-phenylbenzenamine                   | diphenylamine                     |
| N-cyclobutyl-N-methylpropanamide      | N-methylpent-2-enamine            |
| N-isopropylpent-2-en-1-amine          | N-chloro-N-ethylhex-2-en-3-amine  |