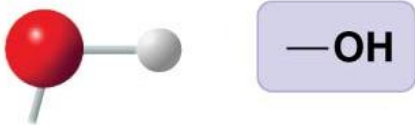
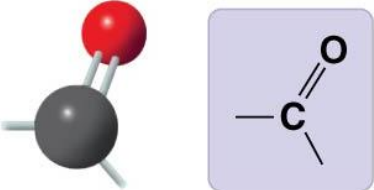
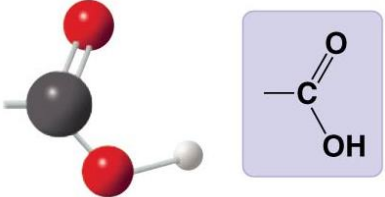
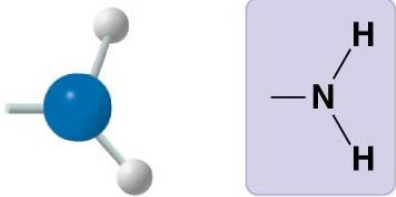


Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Functional Groups Worksheet**

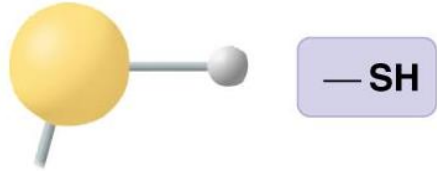
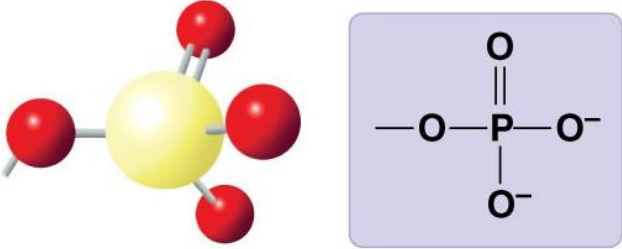
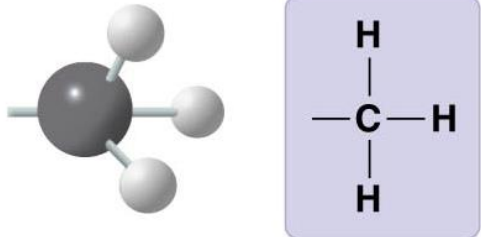
Relatively small, familiar clusters of atoms often determine the characteristics of larger biomolecules. These mini-molecules are known as **functional groups** and are useful chemical “vocabulary words” toward learning the language of biochemistry.

Name of Functional Group	Properties Imparted to Molecule	Circle the Functional Group
		$\begin{array}{c} \text{H} \quad \text{H} \\   \quad   \\ \text{H}-\text{C}-\text{C}-\text{OH} \\   \quad   \\ \text{H} \quad \text{H} \end{array}$
		$\begin{array}{c} \text{H} \quad \text{O} \quad \text{H} \\   \quad    \quad   \\ \text{H}-\text{C}-\text{C}-\text{C}-\text{H} \\   \quad   \\ \text{H} \quad \text{H} \end{array} \qquad \begin{array}{c} \text{H} \quad \text{H} \\   \quad   \\ \text{H}-\text{C}-\text{C}-\text{C}=\text{O} \\   \quad   \\ \text{H} \quad \text{H} \end{array}$
		$\begin{array}{c} \text{H} \\   \\ \text{H}-\text{C}-\text{C}=\text{O} \\   \quad   \\ \text{H} \quad \text{OH} \end{array} \rightleftharpoons \begin{array}{c} \text{O} \\    \\ -\text{C} \\   \\ \text{O}^- \end{array} + \text{H}^+$
		$\begin{array}{c} \text{O} \quad \text{H} \quad \text{H} \\    \quad   \quad   \\ \text{HO}-\text{C}-\text{C}-\text{N} \\   \quad   \quad   \\ \text{H} \quad \text{H} \quad \text{H} \end{array} + \text{H}^+ \rightleftharpoons \begin{array}{c} \text{H} \\   \\ -\text{N}^+-\text{H} \\   \\ \text{H} \end{array}$

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

Date: \_\_\_\_\_

## Functional Groups Worksheet

Name of Functional Group	Properties Imparted to Molecule	<i>Circle the Functional Group</i>
		$  \begin{array}{c}  \text{O}=\text{C}-\text{OH} \\    \\  \text{H}-\text{C}-\text{CH}_2-\text{SH} \\    \\  \text{N} \\  / \quad \backslash \\  \text{H} \quad \text{H}  \end{array}  $
		$  \begin{array}{ccccccc}  & \text{OH} & \text{OH} & \text{H} & & \text{O} & \\  &   &   &   & &    & \\  \text{H} & -\text{C} & -\text{C} & -\text{C} & -\text{O} & -\text{P} & -\text{O}^- \\  &   &   &   & &   & \\  & \text{H} & \text{H} & \text{H} & & \text{O}^- &   \end{array}  $
		$  \begin{array}{c}  \text{NH}_2 \\    \\  \text{N}=\text{C} \\  / \quad \backslash \\  \text{N} \quad \text{C}-\text{CH}_3 \\    \quad \backslash \\  \text{C} \quad \text{C} \\     \quad   \\  \text{O} \quad \text{H} \\    \\  \text{N}-\text{H}  \end{array}  $