

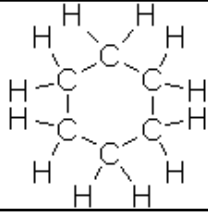
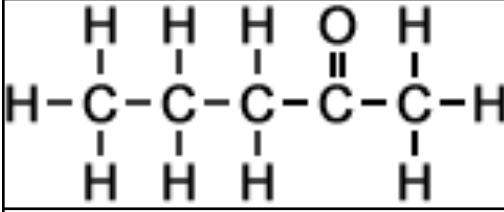
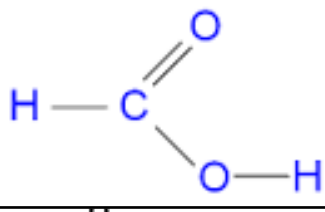
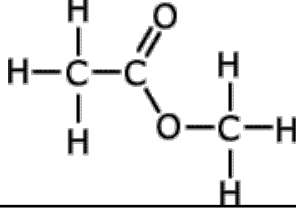
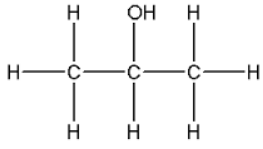
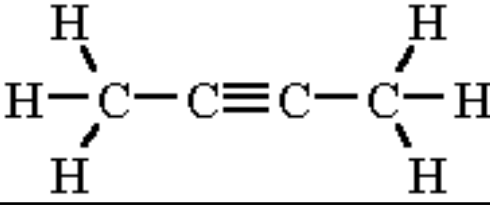
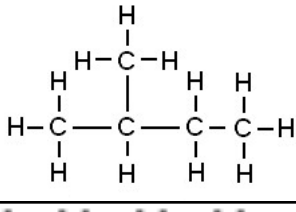
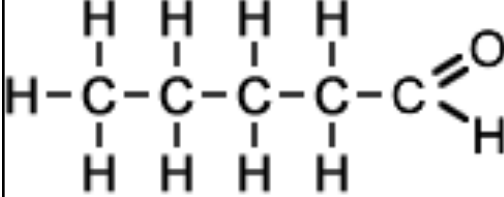
Name: _____

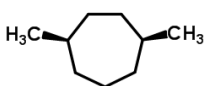
Date: _____

ORGANIC CHEMISTRY - UNIT REVIEW

A. Classify the following organic substances and then name them.

Structure	Functional Group	Name
$ \begin{array}{c} \text{H} \\ \\ \text{H}-\text{C}-\text{C} \\ \quad // \\ \text{H} \quad \text{O} \\ \quad \quad \\ \quad \quad \text{H} \end{array} $		
$ \begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \\ \quad \quad \\ \text{H}-\text{C}-\text{C}-\text{C}-\text{NH}_2 \\ \quad \quad \\ \text{H} \quad \text{H} \quad \text{H} \end{array} $		
$ \begin{array}{c} \text{CH}_3 \\ \\ \text{C}_6\text{H}_5 \end{array} $		
$ \begin{array}{c} \text{H} \quad \text{CH}_3 \quad \text{H} \\ \quad \quad \\ \text{H}-\text{C}-\text{C}-\text{C}=\text{C} \\ \quad \quad \quad \quad \\ \text{H} \quad \text{CH}_3 \quad \quad \quad \text{H} \end{array} $		
$ \begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \\ \quad \quad \\ \text{H}-\text{C}-\text{C}-\text{C}-\text{O}-\text{H} \\ \quad \quad \\ \text{H} \quad \text{H} \quad \text{H} \end{array} $		
$ \begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \\ \quad \quad \\ \text{H}-\text{C}-\text{C}-\text{O}-\text{C}-\text{H} \\ \quad \quad \\ \text{H} \quad \text{H} \quad \text{H} \end{array} $		

$ \begin{array}{ccccccccc} & \text{H} & & \text{H} & & \text{H} & & \text{H} & & \text{H} \\ & & & & & & & & & \\ \text{H} & - \text{C} & - & \text{C} & - & \text{C} & - & \text{C} & - & \text{C} & - \text{H} \\ & & & & & & & & & \\ & \text{H} & & \text{H} & & \text{CH}_3 & & \text{H} & & \text{H} \end{array} $		
$ \begin{array}{ccccccccc} & \text{H} & & \text{H} & & \text{H} & & \text{H} \\ & & & & & & & \\ \text{H} & - \text{C} & - & \text{C} & = & \text{C} & - & \text{C} & - \text{H} \\ & & & & & & & \\ & \text{H} & & & & & & \text{H} \end{array} $		
$ \begin{array}{c} \text{H} \\ \\ \text{H} - \text{C} - \text{Cl} \\ \\ \text{H} \end{array} $		
$ \begin{array}{c} \text{O} \\ \\ \text{CH}_3 - \text{C} - \text{CH}_2 - \text{CH}_3 \end{array} $		
		
$ \begin{array}{ccccccccccc} \text{H} & \text{H} & \text{H} & \text{H} & & \text{H} & \text{H} \\ & & & & & & \\ \text{H} - \text{C} & - \text{C} & - \text{C} & - \text{C} & - \text{O} & - \text{C} & - \text{C} & - \text{H} \\ & & & & & & \\ \text{H} & \text{H} & \text{H} & \text{H} & & \text{H} & \text{H} \end{array} $		
$ \begin{array}{ccccccccccc} & & \text{CH}_3 & & & & & & & & \\ & & & & & & & & & & \\ \text{CH}_3 - \text{CH}_2 - & \text{CH} & - & \text{CH} & - & \text{CH}_2 - & \text{CH}_2 - & \text{CH}_3 \\ & & & & & & & \\ & & & \text{CH}_2 - \text{CH}_3 & & & & \end{array} $		
$ \begin{array}{ccccccc} & \text{H} & & & & & \\ & & & \text{O} & & & \\ & & & // & & \text{H} & \text{H} & \text{H} \\ \text{H} & - \text{C} & - & \text{C} & & & & \\ & & & \backslash & & & & \\ & \text{H} & & \text{O} & - & \text{C} & - & \text{C} & - & \text{C} & - \text{H} \\ & & & & & & & & & \\ & & & & & \text{H} & & \text{H} & & \text{H} \end{array} $		

B. Draw structural formulas for the following.

Name	Structure
propane	
2-methylpropane	
propanoic acid	
methoxypropane	
aminomethane	

2,3-dimethylhexane	
butanal	
ethene	
propyne	
2-methylpropene	

cyclopentane	
3-ethyl-2-methyl pentane	
2-butanol	
methyl propanoate	
methylbenzene	

1-chloro-4-nitro-1,2-butadiene	
3-phenylpentanal	
6-hydroxy-4-methyl heptanoic acid	
1-chloro-2,5-pentadiol	
3-hydroxy-1-hexyne	