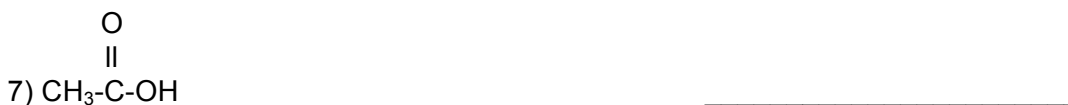


Instructor: Danielle Walker
Bio1100
Learning Unit 12 Lab/ Learning Activity
15 points

Name _____

1-11) Identify the following molecules as an alkane, alkene, alkyne, alcohol, ether, thiol, aldehyde, ketone, carboxylic acid, ester, amine or amide. One term will not be used.



12-18) Name each of the molecules from questions 1-7)

12) _____

13) _____

14) _____

15) _____

16) _____

17) _____

18) _____

19-23) Determine if the molecules are water soluble. Circle either “yes” or “no.”

19) $\text{CH}_3\text{-NH}_2$ **YES** **OR** **NO**

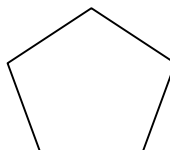
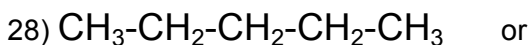
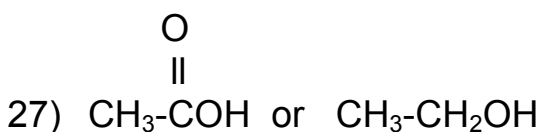
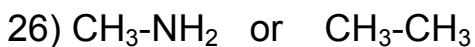
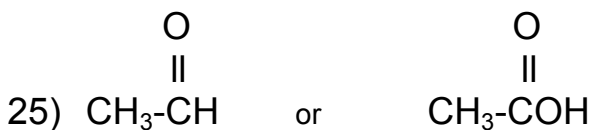
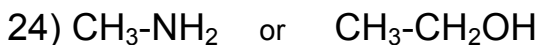
20) $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\overset{\text{O}}{\parallel}\text{COH}$ **YES** **OR** **NO**

21) $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\overset{\text{O}}{\parallel}\text{CH}$ **YES** **OR** **NO**

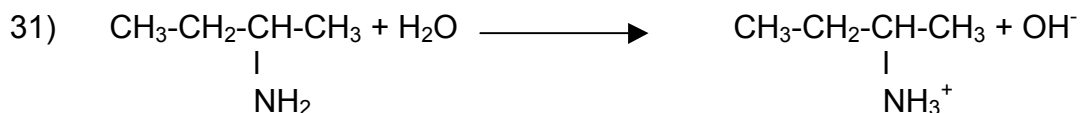
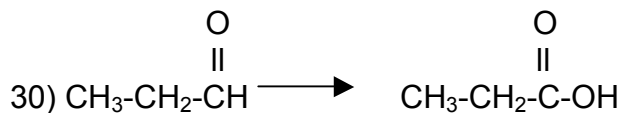
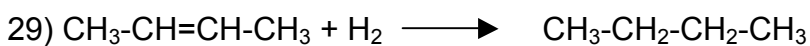
22)  **YES** **OR** **NO**

23) $\text{CH}_3\text{-CH}_2\text{-CH}_3$ **YES** **OR** **NO**

2 points each 24-28) Circle the molecule in each pair that has a higher boiling point.

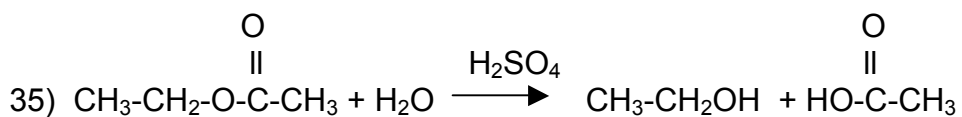
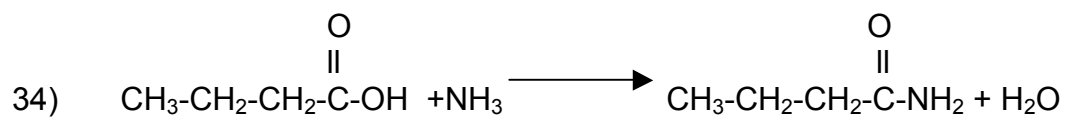
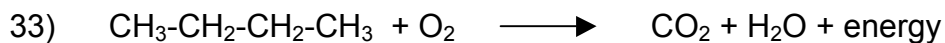
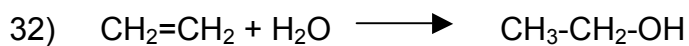


29-35) Identify the following reactions.



Each Reaction is used only once.

Hydrolysis
Acid/Base Reaction
Oxidation
Hydrogenation
Combustion
Hydration
Preparation of Amide/dehydration



36-38) Draw the following molecules. You may draw either expanded structural formulas or condensed structural formulas.

36) Phenol

37) butene

38) iodo-ethyl-octane

39-40) Draw an isomer of the following molecules:

39) $\text{CH}_3\text{-CH}_2\text{-CH}=\text{CH-CH}_3$

40) pentanal