1. (6 points) Name the following compounds according to IUPAC standard nomenclature.





Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. (3 points) Draw the following structures: 3-phenylpentan-3-ol
2. (2 points) The compound 3-phenylpentan-3-ol is classified as a \_\_\_\_\_\_\_\_\_\_\_\_\_ alcohol.
3. (5 points) Rank the following molecules in order of increasing solubility in water (from least soluble to most soluble), and **briefly** explain your answer.



Least soluble Most soluble

1. (8 points) Complete the following reactions. If no reaction occurs, write “No Reaction”.







