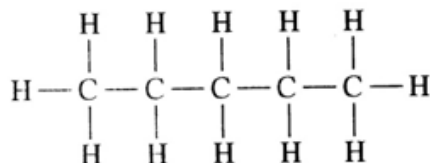


November 1, 2018
AP Chem 2-1-4
Objective: Quiz Stoichiometry
Warm up:

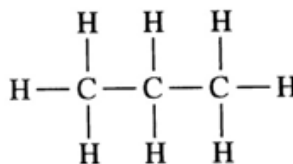


2012B

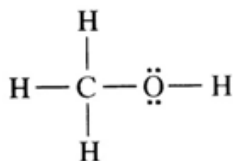
Answer the following questions in terms of principles of chemical bonding and intermolecular forces. In each explanation where a comparison is to be made, a complete answer must include a discussion of both substances. The following complete Lewis electron-dot diagrams may be useful in answering parts of this question.



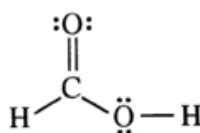
Pentane



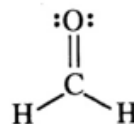
Propane



Methanol



Methanoic (formic) acid



Methanal (formaldehyde)

1. At 1 atm and 298 K, pentane is a liquid whereas propane is a gas. Explain.
2. At 1 atm and 298 K, methanol is a liquid whereas propane is a gas. Explain.
3. Indicate the hybridization of the carbon atom in each of the following:
 - a. Methanol
 - b. Methanoic (formic) acid
4. Draw the complete Lewis electron-dot diagram for a molecule of propanoic acid, $\text{HC}_3\text{H}_5\text{O}_2$.

A solution of ammonium sulfate is added to a saturated solution of barium hydroxide. Identify any precipitate formed in the reaction and what would cause an odor in this reaction.

Equation:

Acetic acid is added to solid sodium carbonate.

If 10.6 g of sodium carbonate is added to 20 mL of a 2.0M solution of acetic acid, what volume of carbon dioxide will be formed at STP?

Assignment: Take Home Quiz due Monday. Worksheet Practice Stoichiometry due Thursday, 2-1-4. Lab Empirical/Molecular and Hydrate on Wednesday, October 31 due Nov. 9. Lab Redox on Nov. 7-9, due Nov. 16. Lab Hard Water Nov. 14- November 16 due Nov. 20. Study Session Mondays, 7:30.