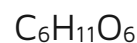


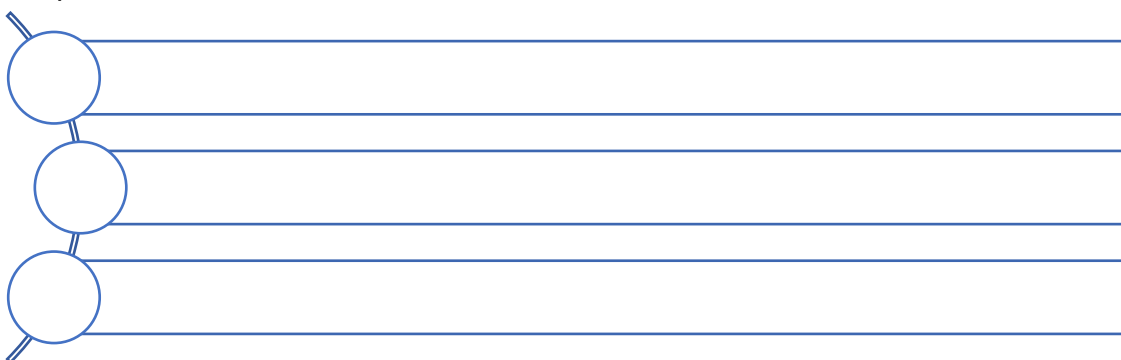
Unit 5, Video 12: Empirical and Molecular Formulas

1. Circle the empirical formulas in the list below:



2. What is the empirical formula for the following molecular formula? C_6H_6

Use the space below to write out the steps necessary for calculating an empirical formula.



3. What formula is necessary for calculating a molecular formula?

4. Use the space below to show all steps necessary for answering the following question: Nicotine contains 74.0% carbon, 8.70% hydrogen, and 17.3% nitrogen. It has a molar mass of 162.2 grams per mole. What is the molecular formula for nicotine?

First find the empirical formula.

Then find the molecular formula.