

# Determining Formulas - Recap

- **PROBLEM:** A compound of B and H is 81.10% B. What is its empirical formula?
- **Stepwise solution**



- **B** 81.10% 81.10g 7.502mol 1 2  $B_2H_5$
- **H** 18.90% 18.90g 18.75mol 2.5 5

# Summary

- Determine the mass percent or percent composition of each element of a molecule using the molecular formula
- Determine an empirical formula using percent composition ( $\% \rightarrow g \rightarrow \text{mol} \rightarrow \text{mol ratios}$ ).
- Determine a molecular formula using molar mass or molecular weight.

End