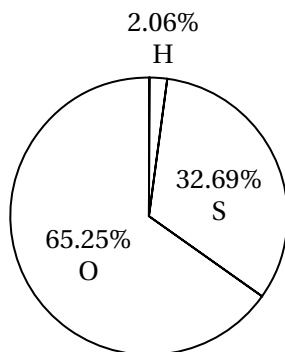


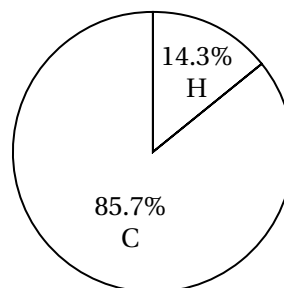
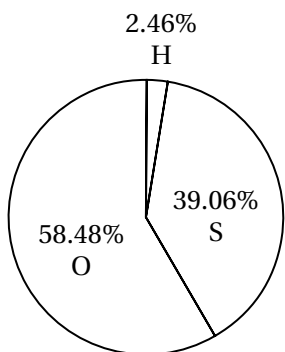
10

INTERPRETING GRAPHICS

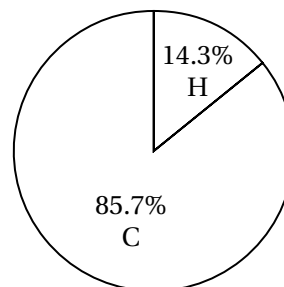
Use with Section 10.3



Acid X

Cyclohexane
 C_6H_{12} 

Acid Y

Ethene
 C_2H_4

Use the circle graphs above to answer the following questions.

1. What is the percent of carbon in 50.0 g of cyclohexane?
2. Calculate the mass of hydrogen in 150.0 g of ethene.
3. Using the circle graphs, explain why percent composition alone is not sufficient to distinguish one compound from another.

4. What information, in addition to percent composition, is needed to distinguish ethene from cyclohexane?

-
5. Scientists can use reactivity as a means of distinguishing between compounds with the same empirical formula. Ethene reacts with bromine to form dibromoethane, $C_2H_4Br_2$. Cyclohexane does not react with bromine. Create a circle graph to show the percent composition of dibromoethane.

6. Which of the circle graphs, labeled Acid X and Acid Y, represents the percentage composition of sulfuric acid, H_2SO_4 ? Which represents the percentage composition of sulfurous acid, H_2SO_3 ?