

Chemistry I

Worksheet 7-3

Percent Composition & Empirical Formulas

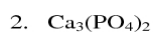
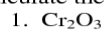
Glencoe Chemistry pp.328-337

Name _____

Period _____

Show your work to receive credit. Circle your final answer.

A. Calculate the *percent composition* for the following compounds.



B. Calculate the *percent by mass* of iron in each of the following compounds.

3. iron (III) oxide

4. iron (II) oxide

C. Determine the *empirical formula* for each compound.

5. A compound contains 0.0130 mol carbon, 0.0390 mol hydrogen, and 0.0065 mol oxygen.

6. A compound consists of 72.2% magnesium and 27.8% nitrogen by mass.

7. Glucose contains 40.0% carbon, 6.7% hydrogen, and 53.3% oxygen by mass.

8. Phosphoric acid is found in some soft drinks. A sample of phosphoric acid contains 0.3086 g of hydrogen, 3.161 g of phosphorus, and 6.531 g of oxygen.