Name_____ Date _____

Warm-Up: Molecular Formulas

All work must be shown using correct units and sig figs!

A compound is composed of 71.02% silver, 7.91% carbon, and 21.07% oxygen. If the molar mass of the compound is 303.8 grams, what is its molecular formula?

Steps

1. Calculate the number of moles of each element.

2. Determine the whole-number mole ratios.

3. Write the empirical formula for this compound: _____

4. Determine the molar mass for the empirical formula.

5. Calculate the integer n (the number which the empirical formula will need to be multiplied by).

6. Determine the molecular formula for this compound.

7. Name this compound: _____