# % Composition 🡪 Empirical & Molecular Formulas Intro

## Part A. Calculate percent composition for the following 5 problems.

1) What is the percent composition by mass of Carbon in Aluminum Carbonate (Al2CO3)?

Answer:

2) What is the percent composition by mass of Oxygen in Calcium Hydroxide (Ca(OH)2)?

Answer:

3) What is the percent composition by mass of Nickel in Nickel (III) Hydroxide (Ni(OH)3)?

Answer:

4) What is the percent composition by mass of Iron in Iron (III) Nitrate (Fe(NO3)3)?

Answer:

5) What is the percent composition by mass of Hydrogen in Sulfuric Acid (H2SO4)

Answer:

## Part B: Define the following vocabulary

**Empirical Formula** =

Example(s):

**Molecular Formula** =

Example(s):

**Mole Ratio** =

Example(s):

# Part C: Identify the following chemical formulas as empirical or molecular. For all molecular formulas, write its empirical (reduced) form as well.

|  |  |  |
| --- | --- | --- |
| Formula given | Empirical or Molecular? | If molecular, give reduced form (empirical formula) |
| 1. |  |  |
| 2. |  |  |
| 3. |  |  |
| 4. |  |  |
| 5. |  |  |
| 6. |  |  |
| 7. |  |  |
| 8. |  |  |
| 9. |  |  |
| 10. |  |  |