## Percent Composition

## Law of definite proportions: elements in a compound have fixed proportions by mass (Joseph Proust)

Different mass percents of elements give you unique chemical compounds.

Ex CO 42.88\% C $\mathrm{CO}_{2} \quad 27.29 \% \mathrm{C}$

Percent composition: List of mass percents of each element in a compound

Ex. The \% composition of $\mathrm{C}_{8} \mathrm{H}_{8} \mathrm{O}_{3}$ is $63.1 \% \mathrm{C}$, $5.3 \% \mathrm{H}$ and 31.6 \% O.

## Calculating \% composition

Ex 1. A 38.72 g sample contains 22.69 g of Mg and 16.03 g of S . Find the \% composition.

Ex 2.What is the \% composition of $\mathrm{FeBr}_{2}$ ?

