

Calculating the Mass of Compounds

Molecular Compounds

- Atoms linked together in discrete, electrically neutral particles
 - O_2 , CO_2
- The mass of molecular compounds is called **molecular mass**

Ionic Compounds

- Composed of ions
 - HCl , $CuSO_4$
- The mass of ionic compounds is called **formula mass**

Calculating

- The relative molecular mass or relative formula mass of a compound is the sum of the relative atomic masses of the atoms in a chemical formula

Example

- $C_9H_8O_4$

$$\begin{aligned} \text{mass} &= 9C + 8H + 4O \\ &= 9(12.01) + 8(1.01) + 4(16.00) \\ &= 180 \end{aligned}$$
