

## Calculating the Mass of Compounds

### Molecular Compounds

- Atoms linked together in discrete, electrically neutral particles
  - O<sub>2</sub>, CO<sub>2</sub>
- The mass of molecular compounds is called **molecular mass**

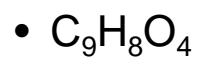
## Ionic Compounds

- Composed of ions
  - HCl, CuSO<sub>4</sub>
- The mass of ionic compounds is called **formula mass**

## Calculating

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

## Example



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