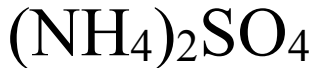# Molar Mass of Compounds

- The molar mass of a compound is calculated by counting the number of atoms of each element in the compound, multiplying the number by the molar mass of the element and then adding the masses of each element in the compound.
- Elements mentioned more than once and included in multiple occurrences of poly−atomic ions must be carefully accounted for.

$$(NH_4)_2SO_4$$

- This compound contains 2 nitrogen atoms, 8 hydrogen atoms 1 sulfur atom and 4 oxygen atoms in each molecule.
- The molar mass is 132.1 g

$$CH_3COOH$$

- This compound contains 2 carbon atoms, 4 hydrogen atoms and 2 oxygen atoms in each molecule.
- The molar mass is 60.1 g