

# Molecular Picture of Gas

- Gas is made up of many individual molecules
- **Number density** is number of molecules/volume  $N/V = \rho/m$ 
  - $\rho$  is the mass density
  - $m$  is the mass for one molecule, i.e. molecular mass (unit for molecular mass is u or amu)
- Number of **moles**  $n = N / N_A$ 
  - $N_A =$  Avogadro's number  $6.022 \times 10^{23} \text{ mole}^{-1}$