

convert to moles: 458166 atoms of H₂O

if 458166 is number of molecules H₂O $\nu = 7.6 * 10^{-19} mol$

$$\nu = \frac{N}{N_A}$$

$$\nu = \frac{458166}{602000 * 10^{18}} = 7.6 * 10^{-19} mol$$

if 458166 is number of H+H+O atoms \rightarrow number of molecules = $458166/3 = 152722 \rightarrow$

$$\nu = 2.5 * 10^{-19} mol$$

$$\nu = \frac{N}{N_A}$$

$$\nu = \frac{152722}{602000 * 10^{18}} = 2.5 * 10^{-19} mol$$