

(L77) Molar Mass

TODAY'S
DATE

E.Q.: How can you convert between mass and moles?

calculating molar mass of compounds

$$\begin{aligned} \text{e.g., } \text{Ca(OH)}_2 &= \underbrace{40.08}_{\text{Ca}} + 2(\underbrace{16.000}_{\text{O}}) + 2(\underbrace{1.0080}_{\text{H}}) \\ &= 74.096 \text{ g/mol} \end{aligned}$$

chemists compare moles of substances rather than masses of substances b/c moles are a way of counting atoms, molecules, or formula units of a compound

remember a "mole" is used like a "dozen": $1 \text{ mol} = 6.022 \times 10^{23}$ things
& $1 \text{ dozen} = 12$ things

molar mass = grams per one mol of a substance