

What is the mass of

a) one mole of Br_2 \therefore 2 mol Br atoms

$$79.90 \times 2 = \textcircled{159.8 \text{ g}}$$

NB : 1 mol of Cl_2 would have 6.02×10^{23} Cl_2 molecules
So it would have double that number of Cl atoms.

1 dozen Br_2 \therefore 2 dozen Br

b) molar mass of CO_2 ?

$$\begin{array}{r} 1 \text{ mol C atoms} \} \rightarrow 12.01 \text{ g} \\ 2 \text{ mol O atoms} \} 2(16.00) = 32.00 \\ \hline 44.01 \text{ g} \end{array}$$

c) molar mass of $\text{C}_6\text{H}_{12}\text{O}_6$ (glucose)

$$6 \text{ C} : 6(12.01 \text{ g}) =$$

$$12 \text{ H} : 12(1.01 \text{ g}) =$$

$$6 \text{ O} : 6(16.00 \text{ g}) =$$

$$180.18 \text{ g}$$

d) molar mass of $\text{Ca}(\text{OH})_2$

1 Ca	:	40.08	40.08
2 O	:	2 (16.00)	32.00
2 H	:	2 (1.01)	2.02

74.10g

e) molar mass of $\text{Sr}(\text{C}_2\text{H}_3\text{O}_2)_2$

$$12.01 \times 2 = 24.02 \quad 2 \times 2 = 48.04$$

$$1.01 \times 3 = 3.03 \quad 2 \times 2 = 6.06$$

$$2 \times 2 = 64$$

$$\begin{array}{r} 118.1 \\ + 87.62 \\ \hline 205.72 \end{array}$$

