

For answer this question you need to use Avogadro constant. In chemistry and physics, the Avogadro constant is defined as the number of constituent particles (usually atoms or molecules) in one mole of a given substance. It has dimensions of reciprocal mol and its value is equal to $6.02 \times 10^{23} \text{ mol}^{-1}$. Atomic weight of Na is 22.99 , it means that 6.02×10^{23} particles weights 22.99 g . Using this:

$$22.99\text{g} \text{ ----- } 6.02 \times 10^{23}$$

$$X \text{ g} \text{ ----- } 1.20 \times 10^{25}$$

$$X = \mathbf{458.27 \text{ g}}$$