

Name :

Class:

Date:

Moles of compounds

Convert Mole of compound to Mole of atom

first: look at this example

Determine the moles of O atom are present in 5.00 mol of P_2O_5 .

solution:

- The relationship between O atom and P_2O_5 is $\frac{5 \text{ mol O}}{1 \text{ mol } P_2O_5}$
 - convert from mole of compound to mole of atom
- $$5.00 \text{ mol } P_2O_5 \times \frac{5 \text{ mol O}}{1 \text{ mol } P_2O_5} = 25 \text{ mol O}$$

Second: Solve this question

1- Plants and animals depend on glucose ($C_6H_{12}O_6$) as an energy source. Calculate the moles of Hydrogen present in 1.25 mol $C_6H_{12}O_6$

- The relationship between H atom and $C_6H_{12}O_6$ is _____
- convert from mole of compound to mole of atom

$$\text{mol } C_6H_{12}O_6 \times \text{_____} = \text{mol H}$$

2- Calculate the number of moles of Aluminum atoms present in 2.5 mol of Aluminum oxide

- Formula of Aluminum oxide =
- The relationship between Al atom and Aluminum oxide is _____
- convert from mole of compound to mole of atom

$$\text{mol} \times \text{_____} = \text{mol Al}$$