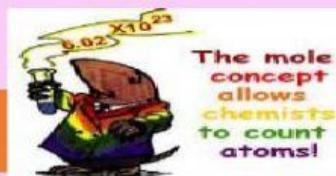


NTSE 2021-22 PRACTICE SHEET  
 TOPIC-MOLE CONCEPT NUMERICALS  
 PREPARED BY- POOJA NARULA NTSE RP LUDHIANA



QUESTIONS

ANSWERS

- Calculate the mass of  $12.044 \times 10^{23}$  carbon atoms.
- Calculate the number of molecules in 11.2 liters of  $\text{SO}_2$  gas at NTP.
- Calculate the number of oxygen atoms in 1 mole of  $\text{O}_2$ .
- What is the volume occupied by  $6.022 \times 10^{23}$  molecules of any gas at NTP?
- Calculate the number of atoms in 100 u of He.
- Calculate the number of Cu atoms in 0.635g of Cu.

$3.011 \times 10^{23}$  molecules.

25 atoms.

$12.044 \times 10^{23}$  atoms.

22.4 L at NTP.

$6.022 \times 10^{21}$  atoms.

24 g.