

THE MOLE AND THE AVOGADRO CONSTANT

1. Mole:

[M/J/04-P3-Q7(a)-1m]/[M/J/13-V32-Q8a] -1m

One mole is the number of particles which is equal to the number of atoms in 12g of carbon-12

or

One mole is equal to 6.023×10^{23} atoms/ions/molecules/particles or electrons

or

One mole of a substance is that substance that has a mass equal to its relative formula mass/relative atomic mass/ relative molecular mass in grams

or

One mole is the amount of a substance that has a volume equal to 24dm^3 of a gas at r.t.p.

or

One mole is the mass in grams that contains the avogadros number of particles.

2. Avogadro constant

[M/J/13-V32-Q8a] -1m

Avogadro constant is the number of particles/atoms/ions or molecules in one mole of a substance.

or

It is the number of carbon atoms in 12grams of carbon-12

or

It is the number of particles or molecules in 24dm^3 of a gas at RTP.

or

It is equal to 6.023×10^{23} atoms /ions/molecules/particles or electrons.
