Find no. of moles of Cu in 10 ki power 20 atoms of Cu.

Solution:

1. $n = \dfrac{N}{N_A}$;

2. No. of atoms of Cu equals 6.02×10^{20} ;

3. No of moles of Cu equals $\dfrac{no.of\ atoms\ of\ Cu}{Avogadro's\ no.}$;

4. $n(Cu) = \dfrac{N(Cu)}{N_A}$;

$n(Cu) = \dfrac{6.02 \times 10^{20}}{6.02 \times 10^{23}} = 1 \times 10^{-3} = 0.001$ mol.

Answer: $n(Cu) = 0.001$ mol.