

**Answer on Question #59922 – Chemistry– Other**

**Question:**

How many moles of magnesium are in  $3.01 \times 10^{22}$  atoms of **magnesium**?

**Answer:**

$$n = N / N_A$$

where  $n$  is amount of moles of magnesium,  $N$  is number of atoms of magnesium,  $N_A$  is a Avogadro constant, which is  $6.02 \times 10^{23} \text{ mol}^{-1}$

So  $n = 3.01 \times 10^{22} / 6.02 \times 10^{23} = \mathbf{0.05 \text{ mol}}$