Question #85353, Chemistry / General Chemistry | for completion

how many atoms in 308 g of copper metal?

Solution:

$\mathrm{n(Cu)}=\frac{308g}{63.546g/mol}=4.8468$ moles

$\mathrm{N}=\mathrm{n}\cdot \mathrm{N_A}=6.02\cdot 10^{23}\cdot 4.8468\ \mathrm{mol}\ =\ 2.917\cdot 10^{24}$ atoms

Answer: $2.917\cdot 10^{24}$ atoms