Answer on Question #79050, Chemistry / General Chemistry

Question:

Calculate the molar mass of copper based on a sample of 1.512 $\cdot~10^{23}$ Cu atoms corresponding to a mass of 15.955 g.

Solution:

Amount of Cu atoms: $1.512 \cdot 10^{23} / 6.022 \cdot 10^{23} = 0.251$ mol

Molar mass of copper: 15.955 / 0.251 = 63.566 g/mol

Answer:

63.566 g/mol