

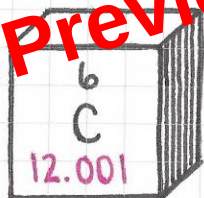
The mass of a mole varies by substance, just like a -DOZEN-

MOLE CONVERSIONS

Mass of 12 Donuts $\neq$ Mass of 12 Cars

Molar Mass = 1 mole = 6.02×10^{23}

atomic mass
=
molar mass



The Molar Mass
of one Carbon atom
= 12.001 g/mole

To calculate the molar mass
of a compound or molecule,
add up all of the individual atoms.

EXAMPLE:

What is the molar mass of H_2O ?

EXAMPLES:

How many grams are in 3.5 moles of K?

_____ =

Calculate the number of moles in 25g of H_2O .

_____ =

How many atoms are present in 2 moles of C?

_____ =