

The numbers are the gateway to understanding picotechnology

Carbon Atoms 0.000,000,000,000,000,000,000,199,42 Gram

The [The Periodic Table of Elements](#), has contributed probably more than anything else to our understanding of matter.

The third most common element in the universe, [carbon](#), with an atomic weight of 12.01. That means 12.01 grams of carbon contains 6.0225×10^{23} atoms of carbon. If you divide atomic weight by Avogadro's number, you get the mass of one carbon atom being 0.000,000,000,000,000,000,000,199,42 grams.

Weight of Carbon Atom	0.00000000000000000000000019942 Grams
Weight of Bacteria	0.000000000625 Grams
Bacteria cells in a Gram	3,134,088,857,687 Trillion
Carbon Atoms in a Gram	5,014,542,172,299,669,040,216 Sextillion
Carbon Atoms in a Gram vs Bacteria's	5,014,542,169,165,580,182,529 Sextillion
Carbon Atoms vs Bacteria for Work	1,599,999,999.000

<https://www.calculator.net/big-number-calculator.html>

A neutron has a mass of $1.67492729 \times 10^{-27}$ kg

A proton is a component of an atomic nucleus with a mass defined as 1 and a charge of +1. A proton is indicated by either the symbol p or p^+ . Because both protons and neutrons are found in the atomic nucleus, they are collectively known as nucleons. Protons, like neutrons, are [hadrons](#), composed of three quarks (2 up quarks and 1 down quark).

A electron is a stable negatively charged component of an atom. Each electron carries one unit of negative charge (1.602×10^{-19} coulomb) and has a very small mass as compared with that of a neutron or proton. Electrons are much less massive than protons or neutrons. The mass of an electron is 9.10938×10^{-31} kg. This is about 1/1836 the mass of a proton and speed of 1375 miles second $\times 3600 \times 24 = 118,800,000$ miles per hours $\times 365 \times 43,362.000,000$ million miles a year.

Atomic Number:	6	Atomic Radius:	170 pm (Van der waals)
Atomic Symbol:	C	Melting Point:	3550 °C (diamond)
Atomic Weight:	12.01	Boiling Point:	3800°C (sublimation)
Electron Configuration:	[He]2s ² p ²	Oxidation States:	+4, +3, [5] +2, +1, [6] 0, -1 , -2 , -3 , -4 [7] (a mildly acidic oxide)

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