prokaryote |prōˈkarēˌōt| (also **procaryote**)

noun Biology

a microscopic single-celled organism, including the bacteria and archaea, that has neither a distinct nucleus with a membrane nor other specialized organelles.

Estimated numerical abundance	Power of Ten
Prokaryotic cells	10^{30}
Stars in universe	10^{23}
Cells in human body	10^{14}
Neurons in human brain	10^{11} cells making approximately 10^{14} synapses
Human beings	10^{9}

Cell unit conversion	Units
Average Prokaryotic cell	*femtograms (10^{-15} grams)*
Dry weight	200
Carbon	100
DNA*	3
RNA	20
Protein	100

* Average bacterial genome = 3,000,000 base pairs (bp) or 3 Megabase pairs (Mb) @ 684 grams per mole (1 amu or Dalton). Genome mass in grams is calculated by multiplying the genome size in bp x 684 ÷ N_A (6.02 x 10^{23}). See Cox, R.A. (2004) Quantitative relationships for specific growth ratios and macromolecular compositions of *Mycobacterium tuberculosis*, *Streptomyces coelicolor* A3(2) and *Escherichia coli* B/r: an integrative theoretical approach. Microbiology. 150:1413-26 for estimations of dry weight, DNA, RNA and protein content.