

LARGE NUMBER LOCATIONS ON THE NUMBER LINE

- 1) Universe's length (determined by its age).....100 septillion..... 10^{26}
- 2) Milky way diameter.....sextillion..... 10^{21}
- 3) Number of cells in the human body.....60 trillion..... 10^{13}
- 4) The national debt as of 1/2008.....9 trillion..... 10^{12}
 - a. It increases 1.44 billion a day..... 10^9each person's share is \$30,000
- 5) Bill Gates' net worth (2007).....59 billion..... 10^{10}
- 6) Length of the solar system.....12 billion km..... 10^{10}
- 7) World's population.....6 billion..... 10^9
- 8) Oprah Winfrey's net worth (2007).....2.5 billion..... 10^9
- 9) U.S. population.....300 million..... 10^8
- 10) Sun's diameter.....1.39 million km..... 10^6
- 11) Jupiter diameter.....142,000 km..... 10^5
- 12) Earth's diameter.....12,000 km..... 10^4
- 13) Moon's diameter.....3,000 km..... 10^3
- 14) Pluto's diameter.....2,000 km..... 10^3

SMALL NUMBER LOCATIONS ON THE NUMBER LINE

- 1) Length of a Closterium bacteria.....1/10 milliter..... 10^{-1}
- 2) Diameter of a pollen grain.....30 micrometers..... 10^{-4}
- 3) Diameter of a chromosome.....10 micrometers..... 10^{-5}
- 4) Diameter of red blood cell.....7-8 micrometers..... 10^{-5}
- 5) Length of mitochondria.....1 micrometer..... 10^{-6}
- 6) Diameter of HIV virus.....1 micrometer..... 10^{-6}
- 7) Diameter of Protein.....10 nanometers..... 10^{-7}
- 8) Size of a nanoparticle.....several 100 nanometers..... 10^{-8}
- 9) Diameter of a DNA strand.....2 nanometers..... 10^{-8}
- 10) Diameter of Carbon nannotube..... $1/2 < 10$ nanometers..... 10^{-9}
- 11) Diameter of Amino Acid.....several hundred picometers..... 10^{-9}
- 12) Diameter of Hydrogen Atom.....100 picometers..... 10^{-10}
- 13) Circumference of Atom's Nucleus.....10 femtometers..... 10^{-14}
- 14) Diameter of a Neutron or Proton.....1 femtometer..... 10^{-15}