SI MEASUREMENT SYSTEM

The International System of Units (SI) is made up of 7 base units, featured on this chart with their Measurement League counterparts. The SI, commonly known as the metric system, is easy to use.

KILOGRAM (kg) MASS

The kilogram is the unit of mass, equal to the mass of the international prototype of the kilogram (IPK).

KELVIN (K) TEMPERATURE

The kelvin, unit of thermodynamic temperature, is the fraction $1/273.16$ of the thermodynamic temperature of the triple point of water.

CANDELA (cd) LUMINOUS INTENSITY

The candela is the luminous intensity, in a given direction, of a source that emits monochromatic radiation of frequency 540×10^{12} hertz and that has a radiant intensity in that direction of $1/683$ watt per steradian.

AMPERE (A) ELECTRIC CURRENT

The ampere is that constant current which, if maintained in two straight parallel conductors of infinite length, of negligible circular cross section, and placed 1 meter apart in vacuum, would produce between these conductors a force equal to 2×10^{-7} newton per meter of length.

METER (m) LENGTH

The meter is the length of the path traveled by light in vacuum during a time interval of $1/299\ 792\ 458$ of a second.

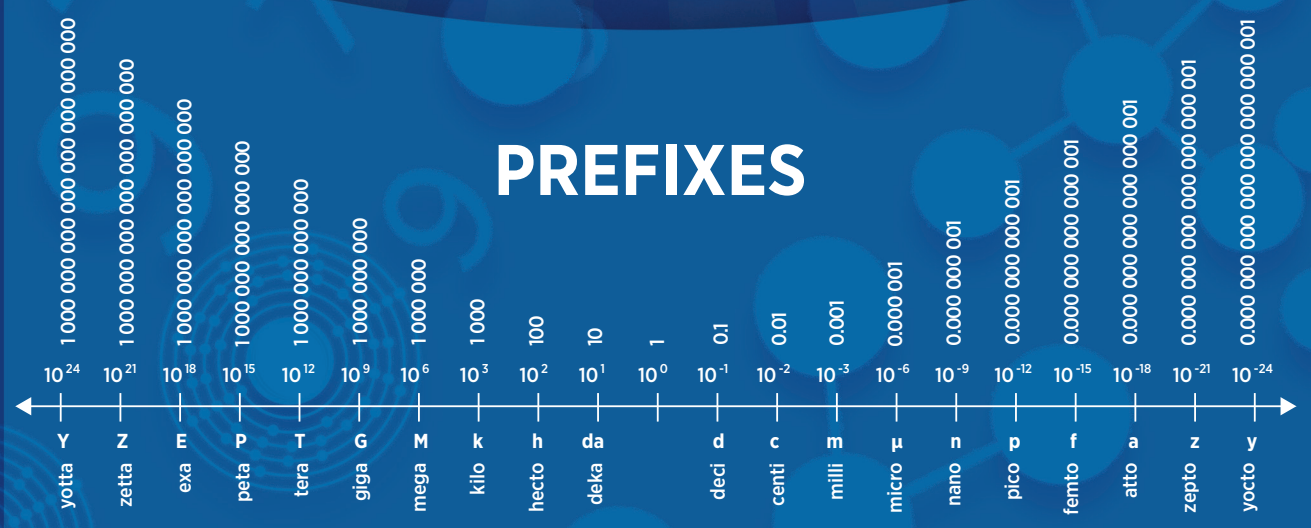
MOLE (mol) AMOUNT OF SUBSTANCE

The mole is the amount of substance of a system which contains as many elementary entities as there are atoms in 0.012 kilogram of carbon 12.

SECOND (s) TIME

The second is the duration of 9 192 631 770 periods of the radiation corresponding to the transition between the two hyperfine levels of the ground state of the cesium 133 atom.

PREFIXES



SI symbols are the same worldwide, regardless of the spelling, language, or alphabet. Prefix symbols are used with a unit symbol to represent smaller or larger units by factors that are powers of 10.

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TheSI@nist.gov
www.nist.gov/metric

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