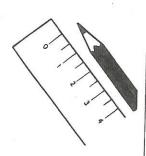
Table of Basic Metric Prefixes and Quantities



A quantitative measurement system has been developed that is used in most of the world. It is called the International System or, more commonly, the metric system. The metric system was designed to relate mass, distance, and volume for one substance—pure water. This is how it works. Imagine a small box that is exactly one centimeter long, one centimeter wide, and one centimeter high. Its volume is one cubic centimeter (cc). If water is added to this container until it is full, that amount of water would be one milliliter and have a mass of one gram. This assumes that water is at a standard (normal) temperature and a standard (normal) air pressure.

The metric system is based on multiples of ten. This makes it very easy to change from one unit to another and it makes it easier to use very large or small numbers.

The basic units of the metric system are the liter, a measure of volume; the meter, a measure of distance; the gram, a measure of mass; and degrees Celsius, a measure of temperature.

Prefix	Quantity	Symbol	Example
kilo	1000	k	1 kilogram = 1000 grams 1 kg = 1000 g
hecto	100	h	1 hectogram = 100 grams 1 hg =100 g
deca	10	dk	1 decagram = 10 grams 1 dkg = 10 g
base unit	1	g, I, m,	1 gram = 1 g 1 liter = 1L 1 meter = 1 m
deci	0.1 (1/10)	d	1 decigram = 0.1 grams 1 dg = 0.1 grams
centi	0.01 (1/100)	С	1 centigram = 0.01 grams 1cg = 0.01 g
milli	0.001 (1/1000)	m	1 milligram = 0.001 grams 1 mg = 0.001 g