

Metric System vs. English System of Measurement

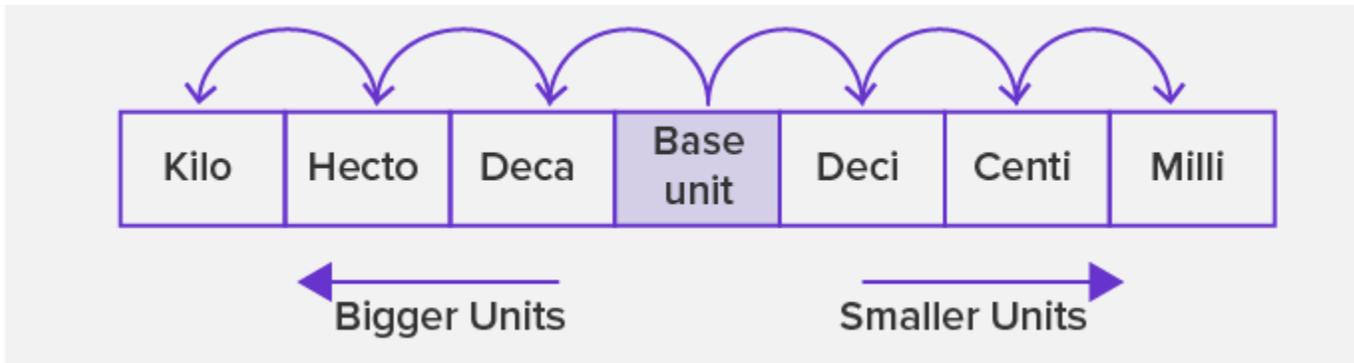
Adapted from SplashLearn <https://www.splashlearn.com/math-vocabulary/geometry/metric-system>

Use this article to fill out the Metric vs. English System foldable.

What is Metric System?

The metric system is a system of measurement that uses the meter, liter, and gram as base units of length (distance), capacity (volume), and weight (mass) respectively.

To measure smaller or larger quantities, we use units derived from the metric units.



- The given figure shows the arrangement of the metric units, which are smaller or bigger than the base unit.
- The units to the right of the base unit are smaller than the base unit. As we move to the right, each unit is 10 times smaller or one-tenth of the unit to its left. So, a 'deci' means one-tenth of the base unit, 'centi' is one-tenth of 'deci' or one-hundredth of the base unit and 'milli' is one-tenth of 'centi' or one-thousandth of the base unit.
- The units to the left of the base unit are bigger than the base unit. As we move to the left, each unit is 10 times greater than the unit to its right. So, a 'deca' means ten times of the base unit, 'hecto' is ten times of 'deca' or hundred times of the base unit and 'killo' is ten times of 'hecto' or thousand times of the base unit.

Kilo	Hecto	Deca	Base Unit	Deci	Centi	Milli
1000	100	10	1	1/10	1/100	1/1000

So, the units for length, mass and capacity(volume) in the metric system are:

Length: Millimeter (mm), Decimeter (dm), Centimeter (cm), Meter (m), and Kilometer (km) are used to measure how long or wide or tall an object is.

Examples include measuring the thickness or length of debit card, length of cloth, or distance between two cities.

Kilometer (km)	Hectometer (hm)	Decameter (dam)	Meter (m)	Decimeter (dm)	Centimeter (cm)	Millimeter (mm)
---------------------------	----------------------------	----------------------------	----------------------	---------------------------	----------------------------	----------------------------

1000	100	10	1	1/10	1/100	1/1000
------	-----	----	---	------	-------	--------

Mass: Gram (g) and Kilogram(kg) are used to measure how heavy an object, using instruments.

Examples include measuring weight of fruits or, our own body weight.

Kilogram (kg)	Hectogram (hg)	Decagram (dag)	Gram (g)	Decigram (dg)	Centigram (cg)	Milligram (mg)
1000	100	10	1	1/10	1/100	1/1000

Volume: Milliliter (ml) and Liter (l) are used to measure how much quantity of liquid an object can hold.

Examples include measuring the amount of juice in a juice can, or amount of water of in a water tank.

Kiloliter (kl)	Hectoliter (hl)	Decaliter (dal)	Liter (l)	Deciliter (dl)	Centiliter (cl)	Milliliter (ml)
1000	100	10	1	1/10	1/100	1/1000

Time: Second is the base unit for time. The other metric units of time are:

1 minute = 60 seconds

1 hour = 60 minute

1 day = 24 hours

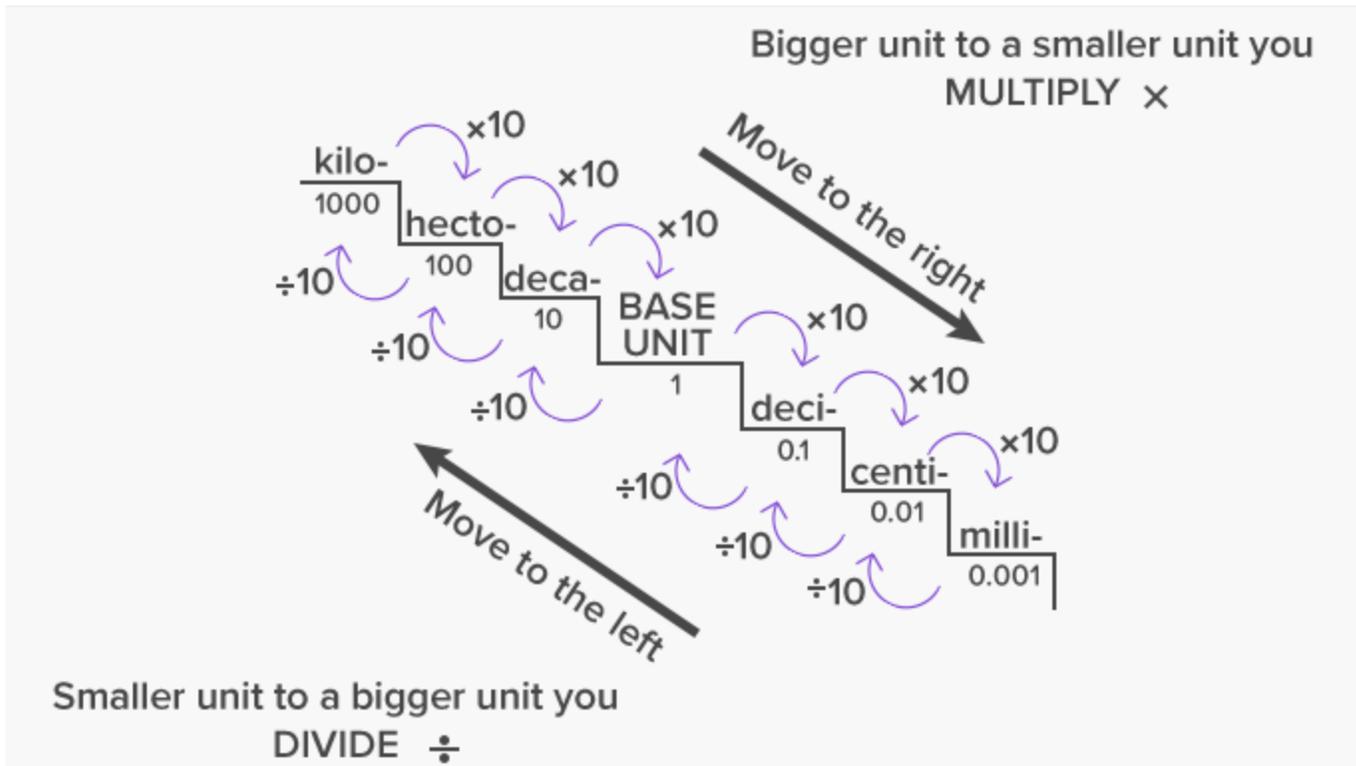
1 week = 7 days

1 month = 30 or 31 days (February has 28 days, in a leap year February has 29 days)

1 year = 12 months

1 year = 365 days (366 days in a leap year)

Here's how we can multiply or divide for making metric conversions. To convert a bigger unit to the smaller unit, we move left to write, we multiple by 10. Moving right to left, from smaller unit to bigger, we divide by 10.



The **US Standard Units** or the **Customary System** uses customary units.

This system measures:

- Length or distance in inches, feet, yards, and miles.
- Capacity or volume in fluid ounces, cups, pints, quarts or gallons.
- Weight or mass in ounces, pounds and tons.