

Canada Canada  
metric métrique

As "How to Write and Type SI — A Style Guide" says, the joy of the metric system lies in its simplicity.

It is a decimal system, which means relationships between quantities are based on tens, like our currency system.

It has only seven base units, compared to 53 in the inch-pound system. Derived units are formed from a combination of two or more base units.

Some common metric units and the quantities they measure are listed below:

Quantity	Metric Unit	Symbol
Length	metre	m
Mass	kilogram	kg
Liquid measure	litre	l or l
Speed	kilometre per hour	km/h
	metre per second	m/s
Temperature	degree Celsius	°C

Larger and smaller units are obtained by combining set prefixes with the metric unit. Some common prefixes with their meanings and symbols are listed below:

Prefix	Means	Symbol
milli	one thousandth	m
centi	one hundredth	c
deci	one tenth	d
kilo	one thousand times	k

## METRE (length)

10 MILLIMETRES (mm) = 1 CENTIMETRE (cm)

100 CENTIMETRES (cm) = 1 METRE (m)

1000 METRES (m) = 1 KILOMETRE (km)

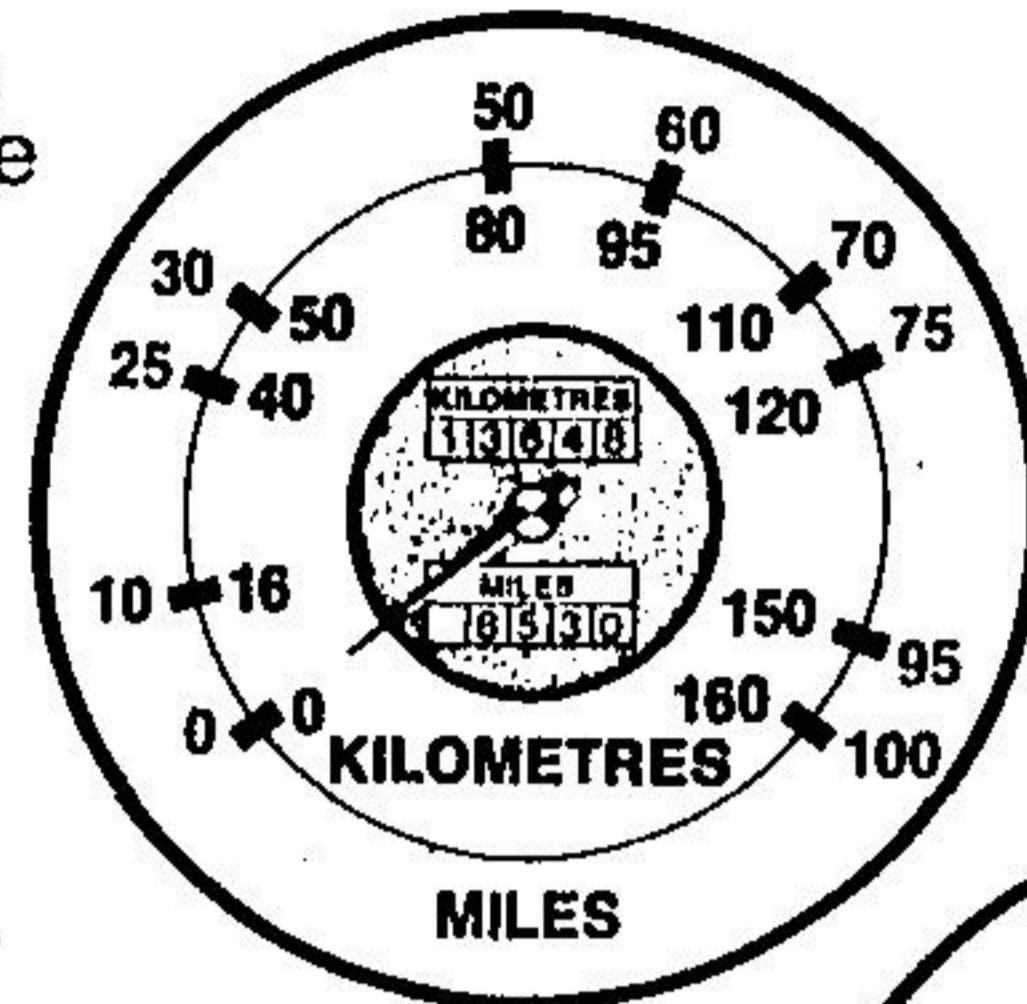
1 INCH	= 25.4 MILLIMETRES
	= 2.54 CENTIMETRES
1 FOOT	= 305 MILLIMETRES
	= 30.5 CENTIMETRES
1 YARD	= 91 CENTIMETRES
	= 0.91 METRE

A millimetre is one thousandth of a metre and a kilometre is one thousand metres. Conversion of a unit to a multiple or submultiple is done by a simple movement of the decimal point. For example:

1 km equals 1000 m (1 km equals 1 m X 1000)  
1 dm equals 0.1 m (1 dm equals 1 m divided by 10)  
1 cm equals 0.01 m (1 cm equals 1 m divided by 100)  
1 mm equals 0.001 m (1 mm equals 1 m divided by 1000)

Quantity	Unit	Symbol	Example
Temperature	degree Celsius	°C	— 20°C is normal room temperature
Length	millimetre	mm	— about the thickness of a paper match
	centimetre	cm	— an average coffee cup is about 10 cm high
	metre	m	— the length of a man's stride
	kilometre	km	— the distance across Canada, at its widest point is 5,160 km
Capacity	millilitre	ml	— a 'large' size of toothpaste holds 150 ml
	litre	l	— a large bottle of wine
Mass	gram	g	— the mass of a paper clip
	kilogram	kg	— a desk telephone has the mass of 2 kg
	tonne	t	— the mass of a compact car
Speed on land	Kilometre per hour	km/h	50 km/h is the usual speed limit on city streets
Pressure in tires	Kilopascal	kPa	— 200 kPa is a typical tire pressure for rear wheels of a car

## They say it's easy to think Metric



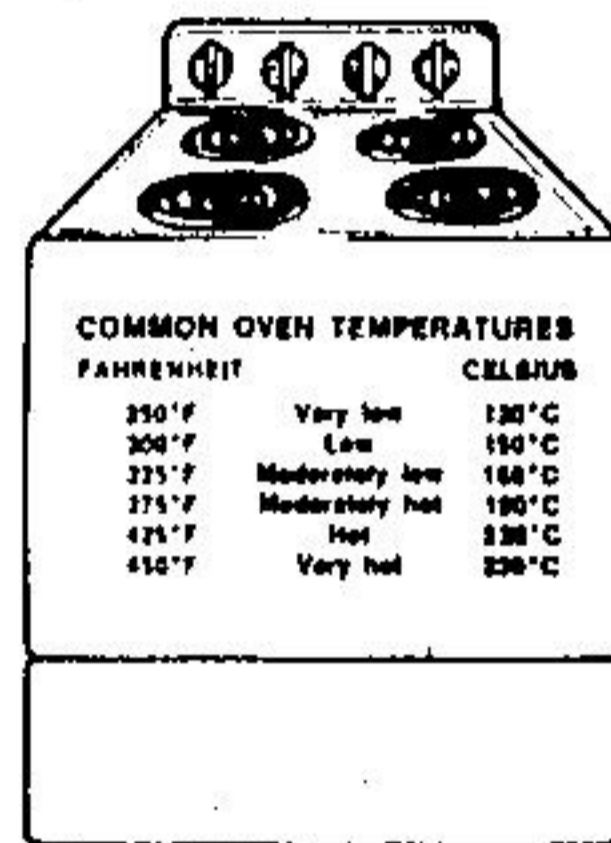
### GAS CONSUMPTION

**BIG CAR**  
10 MILES PER 1 GALLON  
16 KILOMETRES PER 4.5 LITRES  
3.5 KILOMETRES PER 1 LITRE

**SMALL CAR**  
25 MILES PER 1 GALLON  
40 KILOMETRES PER 4.5 LITRES  
8 KILOMETRES PER 1 LITRE

**MOTORCYCLE**  
50 MILES PER 1 GALLON  
80 KILOMETRES PER 4.5 LITRES  
16 KILOMETRES PER 1 LITRE

### CELSIUS (temperature)



There'll be no big change when cooking with metrics.

The new metric measures for recipes and kitchen measuring equipment will be as close as possible to the old.

Old recipes can be used indefinitely, with the aid of conversion stickers which can be stuck in the back of cook books.

The new metric cook books will probably come equipped with similar stickers for conversion to old units.

Conversion stickers will probably be used to convert oven temperatures also. Under the metric system, temperatures are measured in degrees Celsius. (Water freezes at 0 degrees C and boils at 100 degrees C.) The minutes per pound formula for cooking meat will have to be adjusted, not only for the difference in temperature measurement but for the difference in mass, as meat will be measured by the kilogram.

Will we have to convert our present recipes? No—just keep on the same way, but eventually recipes will be shown using metric measures.

There will be five measuring spoons—1, 2.5, 15 and 25 millilitres. Cups will be divided into 250 millilitres.

Here's a conversion table.

There's not much difference between our customary cups and the metric measures. For example:

8 oz. (1 cup) + 1 tbs equals 250 ml (1 1/2 l)

2 cups + 2 tbs. equals 500 ml (1/2 l)

4 cups + 4 tbs. equals 1000 ml (1 l)

1 quart = 1 cup equals 1 litre

Here are three recipes for chocolate chip cookies—first the old recipe, then the same recipe converted to metric, and last the recipe as it will appear when all the concern is long over.

## Try chocolate cookies

### Chocolate chip cookies

Here is an ingredient listing for a current recipe with the metric equivalents.

Imperial	Metric Conversion
1 1/2 cups all-purpose flour	437.5 ml
1/2 tsp. baking soda	2.5 ml
1/2 tsp. salt	2.5 ml
1 cup butter or margarine	250 ml
2/3 cup granulated sugar	167 ml
2/3 cup lightly packed brown sugar	167 ml
1 egg	1
1 tsp. vanilla	5 ml
1 (6 oz.) package chocolate chips	250 ml
1/2 cup chopped nuts	125 ml

The amounts marked with an asterisk required rounding to whole numbers or to multiples of 25. Testing showed sugar amounts could be increased if shortening was decreased. Revised recipe is given below.

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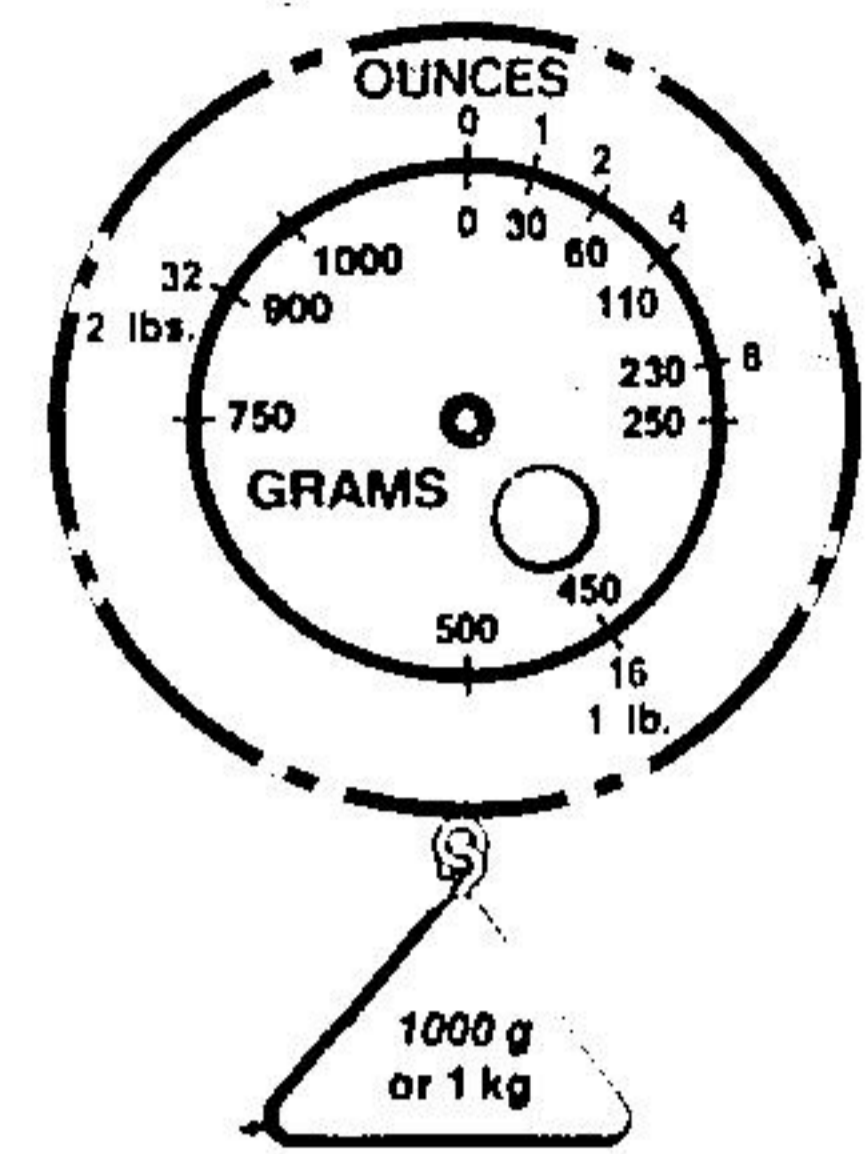
### REVISED METRIC

.425 ml all-purpose flour  
2 ml baking soda  
2 ml salt  
225 ml butter or margarine  
175 ml granulated sugar  
175 ml lightly packed brown sugar  
1 egg  
5 ml vanilla  
250 ml chocolate chips  
125 ml chopped nuts

Preheat oven to 190 degrees C. Lightly grease a baking sheet. Sift together flour, baking soda and salt. Cream butter and sugars together. Beat in egg and vanilla until light and fluffy. Stir in dry ingredients with chocolate chips and nuts. Drop batter from a teaspoon about 5 cm apart on prepared baking sheet.

Bake in preheated 190 degrees C (375 degrees F.) oven for 8 to 10 minutes, or until golden brown. Makes 4 to 5 dozen.

An egg is still an egg. They couldn't make the hen go metric.



GRA  
KILO

1000 g or  
450  
900  
11 (ton

## The Metric world

The metre, the unit of length in the metric system of measurement was created by members of the Paris Academy of Sciences following the request of the Constituent Assembly of France in 1790.

In 1875, 17 nations signed the Treaty of the Metre, establishing the metric system as an international measurement system. This treaty also established the General Conference of Weights and Measures (C.G.P.M.) to conceive, develop and maintain precise international standards of measure. Canada adhered to that treaty on June 15, 1907.

In 1960, the C.G.P.M. adopted a metric system founded on six base units. The world wide abbreviation for the International System of Units thus created is SI.

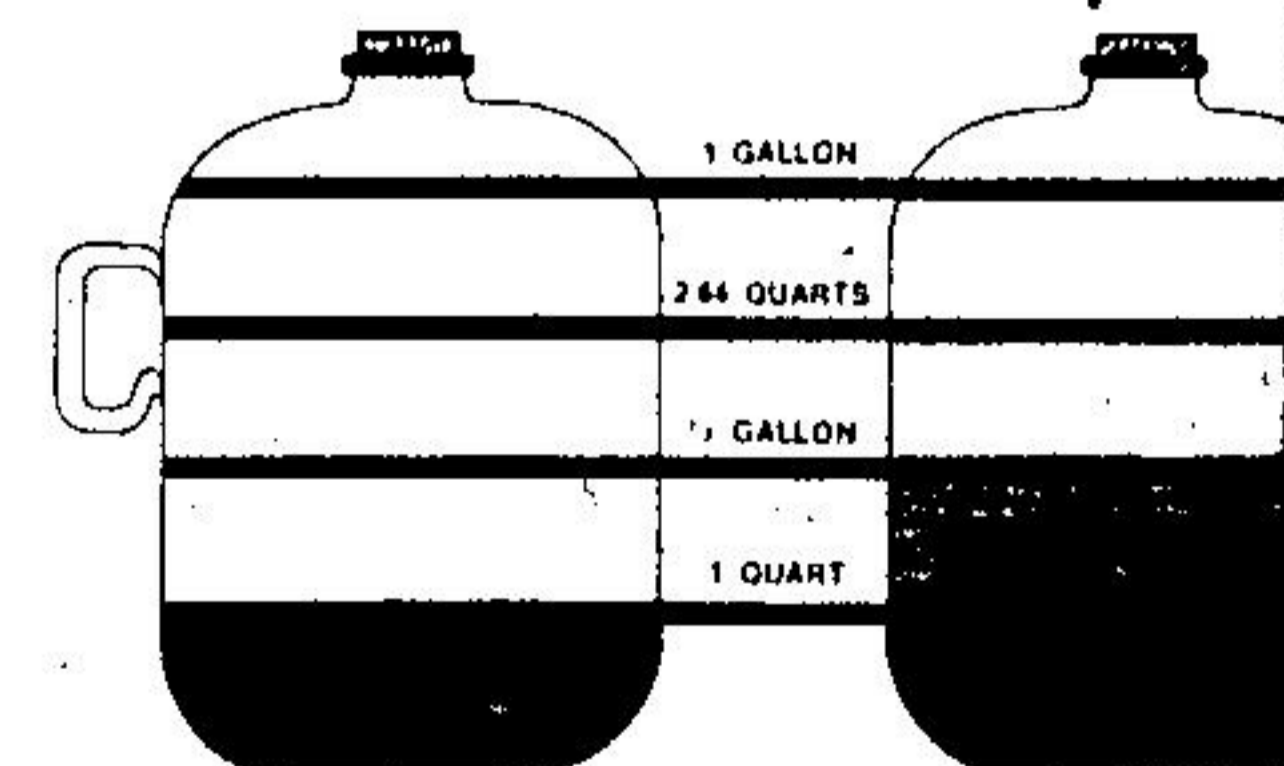
Today, almost 94 per cent of the world's population (99.8 not counting the U.S.A.) is now on the metric system or is converting to it.

Outside of the United States, the only countries that have not yet formally adopted the metric system are:

Country	Population
Barbados	238 000
Gambia	375 000
Jamaica	1 869 000
Liberia	1 871 000
Nauru	6 000
Sierra Leone	2 580 000
Tonga	89 000
Yemen People's Democratic Republic	1 475 000
Total	8 213 000

Out of a world population of 3 706 000 000.

## LITRE (volume)



NOTE: Measurements are approximated for easy conversion.