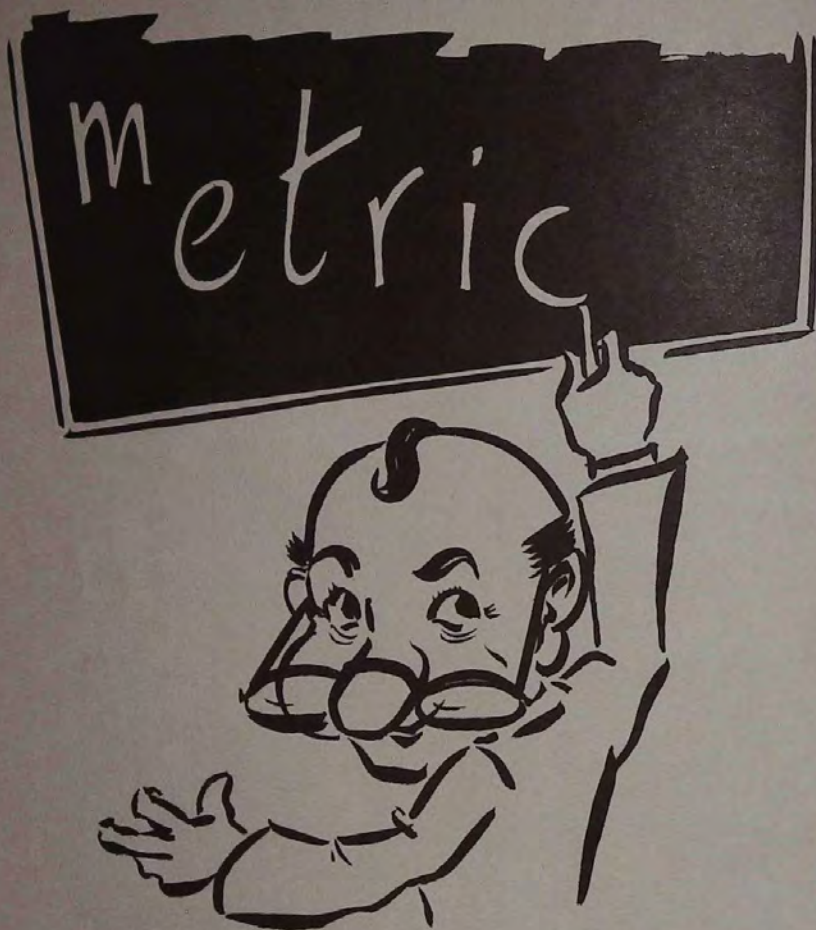




Rhodesia

***GOES
METRIC***

Rhodesians Worldwide



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Rhodesians Worldwide

MARDON

A SIMPLE GUIDE TO METRICATION

Metrication means the changing of our units of measurement from Imperial to metric units. Instead of **yards, pounds, gallons, acres** and **miles** we shall use **metres, kilograms, litres, hectares** and **kilometres**. The old system developed haphazardly and the units bear no particular relationship to each other. King Edward I decreed that three barleycorns laid end to end would be an inch! A yard—according to the decree of King Henry I—was the distance from the point of the King's nose to the end of his thumb! That strange measure called a rod, pole or perch was supposed to equal the combined length of the left feet of 16 men lined up to go to church! Plainly, in this modern technical age we need a more scientific system of measures.

The old units of the Imperial system are difficult to work with, having awkward numbers. For example, 16 ounces to the pound, 112 lbs. to the hundredweight, $5\frac{1}{2}$ yards to the rod, 1760 yards to the mile, 8 pints to the gallon, 212° on the Fahrenheit temperature scale.

Rhodesia is adopting the Systeme Internationale, or "S.I."; the metric system that was internationally accepted in 1960. The metric system and the units have well-rounded numbers. When we get used to the new system we will wonder how we put up with the old one for so long!



King Henry 1 decreed a yard should be the distance from the tip of his nose to the end of his thumb.



King Edward 1 decreed one inch should equal three barley corns laid end to end.

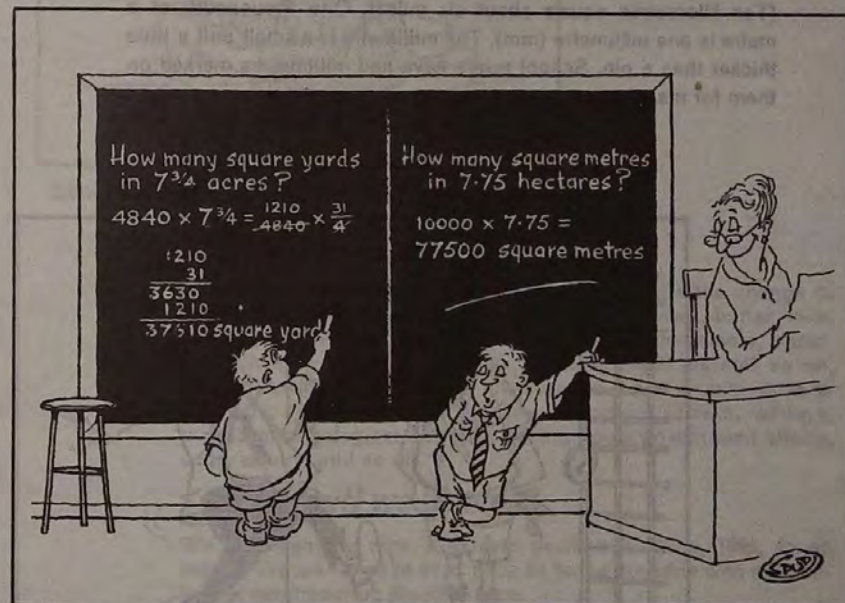
Why change...

The main advantage of the metric system is its simplicity. Because it is much easier to work with than the old Imperial system, time and money will be saved in making calculations.

It is an international system, in use throughout most of the world, and Rhodesia must keep up with the modern trend.

Trade will be facilitated when the partners use the same units. So will the exchange of scientific and technical information.

Industry will benefit because metrication will help to introduce standardisation. There will be fewer sizes and types of items, and a smaller range of packages, which will encourage economy.



Simply move the decimal point four places for the metric sum

IT'S SIMPLE

What are the new Units?

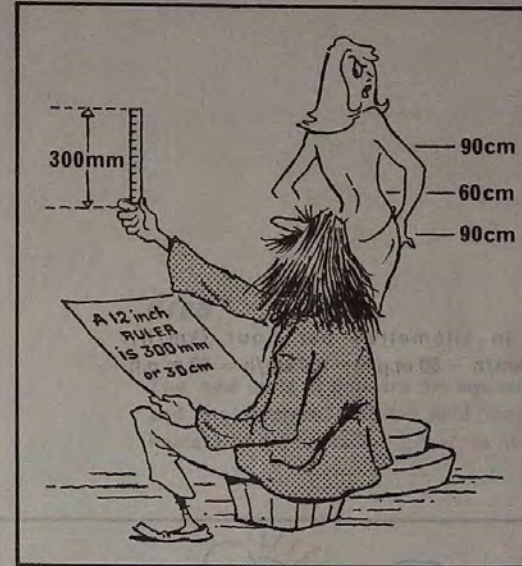
Here are some of the units which will be in most common use:

Length

The metre (m) is the standard unit which replaces yards, and feet. It is similar in length to the yard, being only 3.4 inches longer. One thousand metres (long paces) equals one kilometre (km). (Ten kilometres equals about six miles). One thousandth of a metre is one millimetre (mm). The millimetre is a small unit a little thicker than a pin. School rulers have had millimetres marked on them for many years.



A metre is a long pace



Centimetres may be used for 'biological' measurements

Who will be affected?

Since everyone uses numbers and measurements the change to metric units will affect everybody. Groceries, meat, butter, milk, potatoes, vegetables, soft goods, fuel, shoes, containers, paper, medicines, fertilisers, machinery, building materials and so on, will all have to be weighed or measured in the new units. Also to go metric are sport, health services, education, surveys, railways, posts, meteorological services, mining, local government affairs, water affairs, and so on.

When will we change?

We are changing now. Rhodesia decided in June, 1969, to go metric. We are trying to keep pace as far as possible with metrication in neighbouring South Africa.

There will be no M-Day as with decimalisation. Instead there will be a number of different target dates for various industries, businesses and other activities. There will be big changes over the next year or two.

The change-over is being organised by the Metrication Council, which has formed over 30 committees. These are working out programmes for change in the various sectors of the country's life.



Volume

Gallons, quarts and pints will give way to litres, and fluid ounces will give way to millilitres (A litre equals 0.22 gallons or 1.76 pints. A gallon = 4.5 litres. 28.4 ml = 1 fl. ounce. 100 ml = 3.52 fl. ounces).

Note how the metre again comes in when we measure cubic capacity. The **cubic metre** (m^3) is a cube with each side measuring a metre. If such a cube is divided into 1 000 parts each will be one **litre** (l). Again, if each litre is divided into 1 000 parts, each will be one millilitre (ml).

Mass

We shall have to get used to the term mass instead of weight. They don't mean the same thing. Mass is the actual amount of matter; but the weight is the pull of gravity on an object, which varies in different places on the earth; and of course in outer space, where objects may become weightless.



There are 1 000 grams (g) in a kilogram; and 500 grams being half a kilogram, which is a little more than a pound.

Again, 1 000 kilograms equals one tonne (t), which will replace the ton for heavy goods. The tonne is nearly the same as a long ton (2240 lb.).

Note how the metric system uses tens, hundreds and thousands, which are easy to work with.

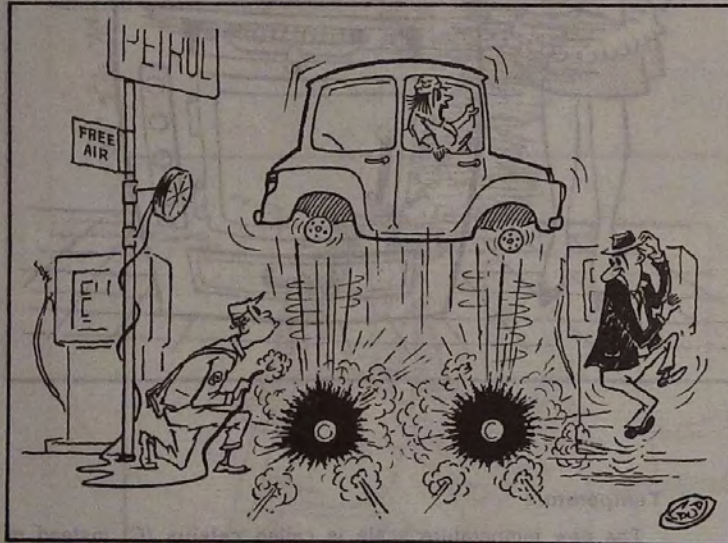


Temperature

The new temperature scale is called **celsius** (C) instead of centigrade. The graduations are the same—from 0° to 100°. The old Fahrenheit scale will no longer be used.

Pressure

When measuring tyre pressures the unit will be the **bar** (bar), instead of lb. per square inch. The bar is approximately the same as the atmospheric pressure at sea level.



24 bars please!

Rainfall

Rainfall will be measured in millimetres. 25 mm = 1 inch nearly.
10 mm = 0.40 inches.



Energy

Calories will be replaced by joules (J) in calculating energy.

Decimals

You will now have noticed that certain prefixes have been used repeatedly:

Milli means a thousandth part.

Centi means a hundredth part.

Kilo means a thousand times.

In the decimal system $0.1 = 1/10$ th; $0.2 = 2/10$ th or $1/5$ th;

$0.3 = 3/10$ ths, and so on.

$0.25 = \frac{1}{4}$; $0.5 = \frac{1}{2}$; $0.75 = \frac{3}{4}$.

Always use a zero before the decimal point when the number is less than one.

When writing long numbers we no longer use commas to separate groups of figures. This is because some countries use the comma instead of a decimal point and confusion would result. Instead, spaces are left between groups of three; e.g. 1 000 000.

It is important always to use the correct abbreviations for the new metric units; otherwise confusion may easily occur. Full stops are not used after the abbreviations. Also remember that an "s" is not added to the symbols in the case of plurals (e.g. 2 kilograms = 2 kg).

When once you get used to the new units you will find additions, subtractions, divisions and multiplications much easier, but try to forget the old units and think in metric only.

SOME COMMONLY USED UNITS AND APPROXIMATE CONVERSIONS

Length

1 kilometre (km)	= 0.62 mile
1 metre (m)	= 1.09 yards or 3.3 feet or 39.4 inches
1 millimetre (mm)	= 0.04 inch
1 mile	= 1.6 kilometres
1 yard	= 0.9 metre
1 foot	= 0.3 metre
1 inch	= 25.4 millimetres

Mass

1 metric tonne (t)	= 2 200 pounds
1 kilogram (kg)	= 2.2 pounds
100 grams (g)	= 3½ ounces
1 pound	= 0.45 kilogram
1 ounce	= 28.35 grams

Volume

1 cubic metre (m³)	= 1.3 cubic yards or 35.3 cubic feet, or 220 gallons
1 litre (l) = 1 000 ml	= 0.22 gallon or 1.76 pints
100 millilitres (ml)	= 3½ fluid ounces
1 gallon	= 4.5 litres
1 pint	= 568 millilitres

Area

1 hectare (ha)	= 10 000 square metres (m²) or 2.5 acres approx.
1 square metre	= 1.2 square yards
1 acre	= 0.4 hectare
1 square yard	= 0.8 square metre

Temperature

0° celsius (C)	= 32° Fahrenheit (freezing point of water)
100° C	= 212° F (boiling point of water)
37° C	= 98.4° F (normal body temperature)
20° C	= pleasant room temperature
40° C	= very warm

Rainfall

10 millimetres (mm)	= 0.40 inch
1 inch	= 25 millimetres

Power

1 kilowatt (kW)	= 1.34 horse power
1 horse power	= 746 watts (W) or 0.746 kW.

Speed

10 km/h	= 6.2 m.p.h.
60 km/h	= 37 m.p.h.
80 km/h	= 50 m.p.h.
100 km/h	= 62 m.p.h.
10 m.p.h.	= 16.1 km/h

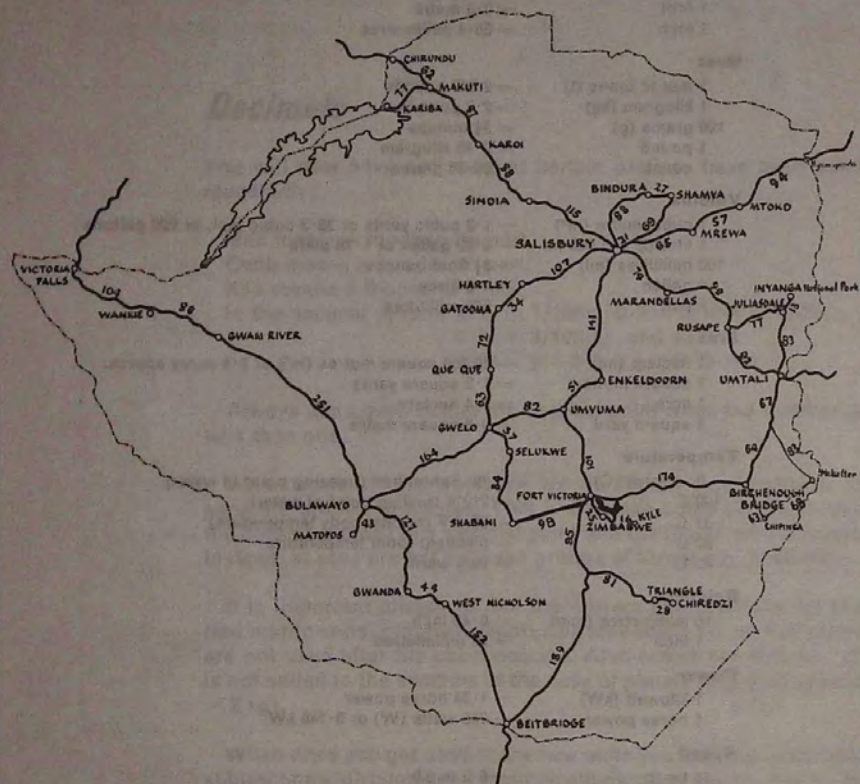
Pressure

1 bar (bar)	= 14.5 lb. per square inch (approx. atmospheric pressure at sea level).
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Energy

1 joule (J)	= 0.24 calories
1 calorie	= 4.2 joules

Road Map of Rhodesia



Distances in Kilometres

**SO
SIMPLE –
IT'S
METRIC
E
T
R
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