

NON-METRIC UNITS OF LENGTH, IN MEMORIAM

IMPERIAL UNITS

- 1 foot = 12 inches (1 inch is about 2.5 cm)
- 1 yard = 3 feet (1 yard is about 91.5 cm)
- 1 rod = 16.5 feet
- 1 chain = 22 yards
- 1 furlong = 40 rods
- 1 mile = 8 furlongs = 1760 yards (1 mile is about 1.6 km)

ROMAN UNITS

- 1 foot = 12 inches = 16 digits = 4 palms
- 1 cubit = 6 palms
- 1 pace (double step) = 5 feet
- 1 mile = 1000 paces

Only 3 countries do not use the metric system, Nigeria, Myanmar and the USA.

THE METRIC SYSTEM

The first practical implementation of the metric system was the system implemented by French Revolutionaries towards the end of the 18th century. Its key features are as follows:

- it is **decimal**
- the unit sizes are **derived from Nature**
- units for different dimensions are **related to each other in a rational manner**
- prefixes are used to denote multiples and sub-multiples** of its units.

COMMON METRIC UNITS OF LENGTH

THE METRE (abbreviation **m**)

the centimetre (abbreviation **cm**)

$1 \text{ m} = 100 \text{ cm}$ (think about 100 cents in one dollar)

the millimetre (abbreviation **mm**)

$1 \text{ m} = 1,000 \text{ mm}$ $1 \text{ cm} = 10 \text{ mm}$

the kilometre (abbreviation **km**)

$1 \text{ km} = 1,000 \text{ m}$

CONVERTING LENGTH MEASUREMENTS

Convert these lengths to the units shown in the brackets:

- 5.2 cm (mm) $5.2 \times 10 = 52 \text{ mm}$
- 734 cm (m) $734 \div 100 = 7.34 \text{ m}$
- 16.3 km (m) $16.3 \times 1,000 = 16,300 \text{ m}$
- 85,000 cm (km) $85,000 \div 100 \div 1,000 = 0.85 \text{ km}$