



A WORLD OF MEASURE

COMPARING THE WORLD'S MEASUREMENT SYSTEMS



Different places, different histories — one common need to measure and understand our world.

	SI – INTERNATIONAL SYSTEM OF UNITS (Modern Metric)	IMPERIAL SYSTEM (UK Traditional)	US CUSTOMARY SYSTEM (United States)	SELECTED TRADITIONAL SYSTEMS (Around the World)
	 The global standard for science, technology and trade. Used by more than 95% of the world.	 Originated in the British Empire. Still used in the UK and some Commonwealth countries.	 Used mainly in the United States. Similar to the Imperial system but not identical.	 Many cultures developed their own units based on the human body, nature and daily life.
LENGTH 	meter (m) millimeter (mm) centimeter (cm) kilometer (km)	inch (in) foot (ft) yard (yd) mile (mi)	inch (in) foot (ft) yard (yd) mile (mi)	CHINA (Traditional) chi (尺) ≈ 33.3 cm li (里) ≈ 576 m
MASS 	kilogram (kg) gram (g) milligram (mg) tonne (t)	ounce (oz) pound (lb) stone (st) ton (long ton)	ounce (oz) pound (lb) short ton (2,000 lb) (ton ≠ Imperial ton)	JAPAN (Traditional) shaku (尺) ≈ 30.3 cm ken (間) ≈ 1.82 m koku (石) ≈ 180.4 liters
TIME 	second (s) millisecond (ms) microsecond (μs) hour (h)	second (s) minute (min) hour (h)	second (s) minute (min) hour (h)	INDIA (Traditional) hasta (हस्त) ≈ 45 cm man (मन) ≈ 1.87 m seer (सीर) ≈ 0.933 kg
TEMPERATURE 	kelvin (K) celsius (°C)	degree Celsius (°C) (Fahrenheit (°F) still widely used)	Fahrenheit (°F) (celsius (°C) increasingly used)	ARAB WORLD cubit (عزب) ≈ 45–60 cm ratl (رطل) ≈ 0.453 kg
VOLUME 	mole (mol)	pint (pt) quart (qt) gallon (gal)	fluid ounce (fl oz) cup (c) pint (pt) quart (qt) gallon (gal)	AFRICA (Various) kuba (DR Congo) ≈ 1.35 L n'gama (Ethiopia) ≈ 0.5 L
AMOUNT OF SUBSTANCE 	ELECTRIC ampere (A)			ANCIENT ROME pes (Roman foot) ≈ 29.6 cm sextarius ≈ 0.546 L
LUMINOUS INTENSITY 	candela (cd)			

HOW THEY COMPARE

LENGTH EXAMPLES

	1 in = 2.54 cm
	1 ft = 30.48 cm
	1 yd = 91.44 cm
	1 mi = 1.609 km

MASS EXAMPLES

	1 oz ≈ 28.35 g
	1 lb ≈ 0.453592 kg
	1 stone = 14 lb ≈ 6.350 kg
	1 ton (US) = 2,000 lb ≈ 907.185 kg
	1 ton (Imperial) = 2,240 lb ≈ 1,016.046 kg

VOLUME EXAMPLES

	1 cup (US) ≈ 236.59 ml
	1 pint (US) ≈ 473.18 ml
	1 quart (US) ≈ 946.35 ml
	1 gallon (US) ≈ 3.785 L
	(1 L = 1,000 ml)

TEMPERATURE EXAMPLES

	0 °C = 32 °F (freezing point of water)
	20 °C = 68 °F (room temperature)
	100 °C = 212 °F (boiling point of water)
	0 K = -273.15 °C (absolute zero)
	°F = (°C × 9/5) + 32 °C = (°F - 32) × 5/9

WHY IT MATTERS



GLOBAL COMMUNICATION
Common units make science, trade, travel and technology possible.



ACCURACY & SAFETY
Consistent measurements prevent errors and save lives.



INNOVATION
Standardization drives engineering, research and discovery.



CULTURE & HERITAGE
Traditional units reflect history, local wisdom and ways of life across civilizations.

FUN FACT

The metric system is based on powers of 10, making conversions simple. It was designed in France in 1795 to create a universal language of measurement.

THINK GLOBAL.
MEASURE UNDERSTAND.

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