

## Metric to U.S.

### LENGTH

Metric Measure	Multiplied By	Equals US Measure
Millimeter	X 0.0394	Inches
Centimeter	X 0.3937	Inches
Meters	X 3.2808	Feet
Meters	X 1.0936	Yards
Kilometers	X 0.6214	Miles

### AREA

Metric Measure	Multiplied By	Equals US Measure
Square Centimeter	X 0.155	Square Inches
Square Meters	X 1.1960	Square Yards
Square Kilometers	X 0.3861	Square Miles
Hectares	X 2.4710	Acres

### WEIGHT

Metric Measure	Multiplied By	Equals US Measure
Grams	X 0.0353	Ounces
Kilograms	X 2.2046	Pounds
Tonnes	X 1.1	Short Tons

### VOLUME

Metric Measure	Multiplied By	Equals US Measure
Milliliters	X 0.0338	Fluid Ounces
Liters	X 2.1134	Pints
Liters	X 1.0567	Quarts
Liters	X 0.2642	Gallons
Cubic Meters	X 35.3145	Cubic Feet
Cubic Meters	X 1.3079	Cubic Yards

### TEMPERATURE

Metric Measure	Multiplied By	Equals US Measure
Centigrade	X 1.8 (+32)	Fahrenheit

To calculate the approximate U.S. measure equivalent to a known metric measure, simply multiply the metric quantity by the conversion factor in the center column. Example: 38 Kilograms = 84 pounds, approximately (38x2.2046 = 83.78).

## U.S. to Metric

### LENGTH

US Measure	Multiplied By	Equals Metric Measure
Inches	X 2.54	Centimeter
Feet	X 30.48	Centimeter
Yards	X 0.9144	Meters
Miles	X 1.6093	Kilometers

### AREA

US Measure	Multiplied By	Equals Metric Measure
Square inches	X 6.452	Square Centimeter
Square feet	X 0.0929	Square Meters
Square yards	X 0.8361	Square Meters
Square miles	X 2.59	Square Kilometers
Acres	X 0.4047	Hectares

### WEIGHT

US Measure	Multiplied By	Equals Metric Measure
Ounces	X 28.3495	Grams
Pounds	X 0.4536	Kilograms
Short Tons	X 0.9072	Tonnes

### VOLUME

US Measure	Multiplied By	Equals Metric Measure
Fluid Ounces	X 29.574	Milliliters
Pints	X 0.4732	Liters
Quarts	X 0.9463	Liters
Gallons	X 3.7853	Liters
Cubic feet	X 0.0283	Cubic Meters
Cubic yards	X 0.7646	Cubic Meters

### TEMPERATURE

US Measure	Multiplied By	Equals Metric Measure
Fahrenheit	-32 (/1.8)	Centigrade

To calculate the approximate metric measure equivalent to a known U.S. measure, simply multiply the U.S. quantity by the conversion factor in the center column. Example: 563 miles = 900 kilometer, approximately (563 x 1.6093 = 906.04).

## Easy Conversions

Measurement	Symbol	When You Know	Multiply by	to find	symbol
<b>LENGTH / AREA</b>	mm	millimeters	0.03937	inches	in
	cm	centimeters	0.3937	inches	in
	m	meters	3.3	feet	ft
	m	meters	1.1	yards	yd
	km	kilometers	0.6	centimeters	cm
	in	inches	2.54	centimeters	cm
	ft	feet	30.48	meters	m
	yd	yards	0.9	kilometers	km
	cm <sup>2</sup>	square centimeters	0.16	square inches	in <sup>2</sup>
	m <sup>2</sup>	square meters	1.2	square yards	yd <sup>2</sup>
	km <sup>2</sup>	square kilometers	0.4	square miles	mi <sup>2</sup>
	ha <sup>2</sup>	hectares(10,000m <sup>2</sup> )	2.5	acres	in <sup>2</sup>
	in <sup>2</sup>	square inches	6.5	square centimeters	cm <sup>2</sup>
	ft <sup>2</sup>	square feet	0.09	square meters	m <sup>2</sup>
	yd <sup>2</sup>	square yards	0.8	square meters	m <sup>2</sup>
mi <sup>2</sup>	square miles	2.6	square kilometers	km <sup>2</sup>	
<b>WEIGHT</b>	g	grams	0.035	ounces	oz
	kg	kilograms	2.2046	pounds	lb
	t	tonnes (1000 kg)	1.1	short tons	tn
	oz	ounces	28.3495	grams	g
	lb	pounds	0.45	kilograms	kg
<b>VOLUME</b>	ml	milliliters	0.03	fluid ounces	Fl oz
	l	liters	2.1	pints	pt
	l	liters	1.06	quarts	Qt
	l	liters	0.26	gallons	Gal
	m <sup>3</sup>	cubic meters	35.314	cubic feet	ft <sup>3</sup>
	m <sup>3</sup>	cubic meters	1.3	cubic yards	yd <sup>3</sup>
	tsp	teaspoons	5	milliliters	mL
	tbsp	tablespoons	15	milliliters	mL
	Fl oz	Fluid ounces	30	liters	mL
	c	cups	0.24	liters	l
	pt	pints	0.47	liters	l
	qt	quarts	0.97	liters	l
	gal	gallons	3.8	cubic meters	l
	ft <sup>3</sup>	cubic feet	0.03	cubic meters	m <sup>3</sup>
Yd <sup>3</sup>	cubic yards	0.76	cubic meters	m <sup>3</sup>	

## Metric Basics Common Measurements

### LENGTH

1 kilometer = 0.62137 mile  
1 meter = 3.2808 feet  
1 centimeter = 0.3937 inches  
1 mile = 1.6093 kilometers  
1 foot = 0.3048 meters  
1 inch = 2.54 centimeters

### WEIGHT

1 kilogram = 2.2046 pound  
1 gram = 0.0353 ounces  
1 short ton = 907.1847 kilos  
1 pound = 0.4536 kilos  
1 ounces = 28.3495 grams

### VOLUME

1 hecoliter = 100 liters = 0.1 cubic meters = 26.4172 gallons  
1 liter = 100 centiliters = 1 cubic decimeter = 1.0567 quarts  
1 gallon = 3.7853 liters  
1 cubic inch = 16.3871 cubic centimeters

### AREA

1 square kilometer = 1 million square meters = 0.3861 square miles  
1 hectare = 10,000 square meter = 2.471 acres  
1 square meter = 10.7639 square feet = 1550.003 square inches  
1 square mile = 640 acres = 258.9988 hectares  
1 square foot = 144 square inches = 929.0304 square centimeters

- The three basic metric units are the meter (length), the gram (weight), and the liter (volume).

- The key to metric prefixes are:

1,000 = kilo

100 = hecto

10 = deca

0.1 = dec

0.01 = cent

0.01 = milli