

Trades Math Reference Sheet (Metric Unit Symbols and Relationships)

Notes for Use

- Metric conversions are based on powers of 10 (move the decimal point).
- Always check units to confirm your answer is reasonable.
- Use this reference sheet during problem solving—memorization is not required.

Table 1: Time Conversions

Unit	Symbol	Conversion
second	s	—
minute	min	1 min = 60 s
hour	h	1 h = 60 min
day	d	1 d = 24 h
year	a	1 a = 365 d

Table 2: Length and Area Conversions

Quantity	Unit	Symbol	Conversion
Length	kilometre	km	1 km = 1000 m
	metre	m	1 m = 100 cm
	centimetre	cm	1 cm = 10 mm
	millimetre	mm	1 m = 1000 mm
Area	hectare	ha	1 ha = 10,000 m ²
	square kilometre	km ²	1 km ² = 1,000,000 m ²
	hectare	ha	1 km ² = 100 ha
	square metre	m ²	1 ha = 10,000 m ²
	square centimetre	cm ²	1 m ² = 10,000 cm ²

Table 3: Volume Conversions

Unit	Symbol	Conversion
kilolitre	kL	1 kL = 1000 L

Table 3: Volume Conversions

Unit	Symbol	Conversion
cubic metre	m ³	1 m ³ = 1 kL
litre	L	1 L = 1000 mL
cubic centimetre	cm ³	1 L = 1000 cm ³
millilitre	mL	1 mL = 1 cm ³

Table 4: Mass Conversions

Unit	Symbol	Conversion
kilolitre	kL	1 kL = 1000 L
cubic metre	m ³	1 m ³ = 1 kL
litre	L	1 L = 1000 mL
cubic centimetre	cm ³	1 L = 1000 cm ³
millilitre	mL	1 mL = 1 cm ³

Table 5: Water Equivalencies

Quantity	Equivalent Mass
1 kL of water	1 tonne (t)
1 L of water	1 kilogram (kg)
1 mL of water	1 gram (g)

Table 6: Metric Prefixes

Prefix	Symbol	Value
mega	M	1,000,000
kilo	k	1,000
hecto	h	100
deca	da	10
deci	d	0.1
centi	c	0.01
milli	m	0.001
micro	μ	0.000001