

UNITS CONVERSION LADDER

Use the ladder to convert between **metric units**.

HOW TO USE

TO CONVERT UP
(to a larger unit)

Move up the ladder.
Divide by 10 for each step.



TO CONVERT DOWN
(to a smaller unit)

Move down the ladder.
Multiply by 10 for each step.



KEY



÷ 10 (up)



× 10 (down)

kilo- k	10^3
hecto- h	10^2
deca- da	10^1
(base unit) —	10^0
deci- d	10^{-1}
centi- c	10^{-2}
milli- m	10^{-3}

EXAMPLES

Convert 2.5 km to m

km → m is 3 steps down.

$$2.5 \times 10 \times 10 \times 10$$

$$= 2.5 \times 10^3$$

$$= 2500 \text{ m}$$

Convert 750 g to kg

g → kg is 3 steps up.

$$750 \div 10 \div 10 \div 10$$

$$= 750 \div 10^3$$

$$= 0.75 \text{ kg}$$

Convert 4.2 cm to mm

cm → mm is 1 step down.

$$4.2 \times 10$$

$$= 42 \text{ mm}$$

COMMON METRIC LADDERS



LENGTH

km hm dam **m** dm cm mm

10^3 10^2 10^1 10^0 10^{-1} 10^{-2} 10^{-3}



MASS

kg hg dag **g** dg cg mg

10^3 10^2 10^1 10^0 10^{-1} 10^{-2} 10^{-3}



VOLUME

kL hL daL **L** dL cL mL

10^3 10^2 10^1 10^0 10^{-1} 10^{-2} 10^{-3}



CAPACITY

kL hL daL **L** dL cL mL

10^3 10^2 10^1 10^0 10^{-1} 10^{-2} 10^{-3}

YOUR EXAMPLES

NOTES