

ANSWER KEY

Fill-in metric chart: key



Part 1: complete every empty box using the word bank. Part 2 is on the back: label the staircase and finish the rules.

PREFIX	SYMBOL	POWER OF 10	MULTIPLY THE BASE UNIT BY
tera	T	10^{12}	1,000,000,000,000
giga	G	10^9	1,000,000,000
mega	M	10^6	1,000,000
kilo	k	10^3	1,000
hecto	h	10^2	100
deka	da	10^1	10
deci	d	10^{-1}	0.1
centi	c	10^{-2}	0.01
milli	m	10^{-3}	0.001
micro	μ	10^{-6}	0.000001
nano	n	10^{-9}	0.000000001
pico	p	10^{-12}	0.000000000001

WORD BANK

centi

deci

deka

giga

hecto

kilo

mega

micro

milli

nano

pico

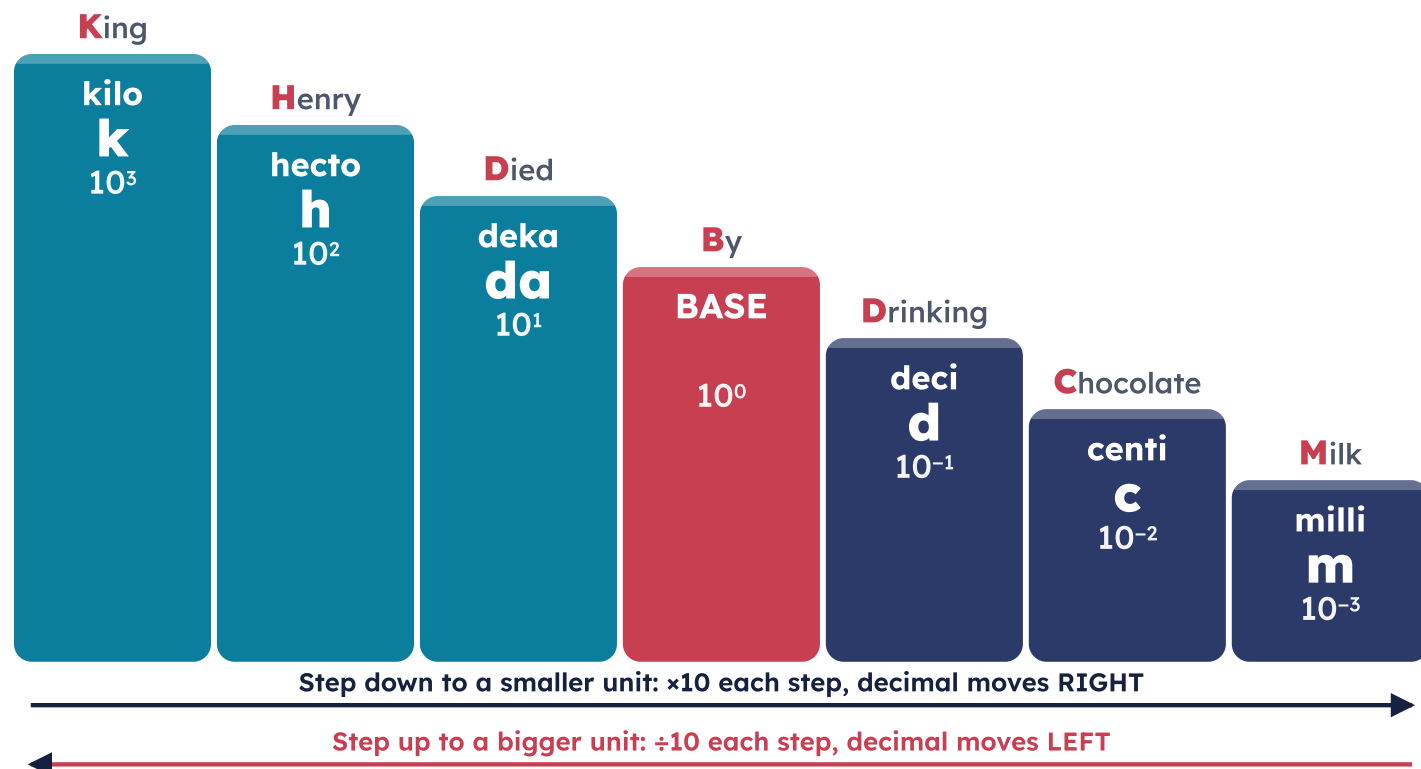
tera

Tip: Read the power of ten like a rule. 10^3 means three zeros, so kilo = 1000 times the base unit. A negative power means a fraction: 10^{-3} is one thousandth, so milli = $1/1000$.

ANSWER KEY

Label the staircase

Write the prefix name, symbol and power of ten on each step. The first letters of the mnemonic are your clue.



Base units

Length: the meter (m)

Mass: the gram (g)

Volume: the liter (L)



The rules

Down one step: I multiply by 10.

Up one step: I divide by 10.

Going down, the decimal point moves right.



Complete the facts

1 km = 1000 m

1 m = 100 cm

1 cm = 10 mm

1 kg = 1000 g

1 L = 1000 mL



Try three

1. 49 m = 49,000 mm

2. 41,000 g = 41 kg

3. 57 km = 57,000 m