

The Metric System – Resource Page

(International System of Units)

Scientists USUALLY use the metric system to collect data. It makes it easier to COMMUNICATE with other scientists around the world when they use the SAME system.

PREFIX	ABBREVIATION	MASS UNIT	LENGTH UNIT	VOLUME UNIT
Equipment		Balance	Ruler /Calipers Tape measure	Beaker / Graduated Cylinder
Kilo -	K	Kilogram Kg	Kilometer Km	Kiloliter KL
Hecto-	H	Hectogram Hg	Hectometer Hm	Hectoliter HL
Deka -	D	Dekagram Dg	Decameter Dm	Dekaliter DL
BASE UNIT	-----	Gram g	Meter m	Liter L
deci -	d	decigram dg	decimeter dm	deciliter dL
centi -	c	centigram cg	centimeter cm	centiliter cL
milli -	m	milligram mg	millimeter mm	milliliter mL
micro – <small>*this unit is 1000 times smaller than “milli”</small>	μ	microgram μg	micrometer μm	microliter μL

BIGGER UNITS

SMALLER UNITS

Kilo- Hecto- Deka- *base unit* deci- centi- milli- *micro-



Move decimal to the left



Move decimal to the right

HOW DO I CHANGE UNITS ??

Smaller unit to bigger unit: 3.42 m = 0.00342 km

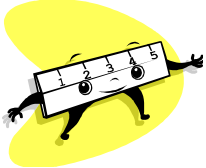
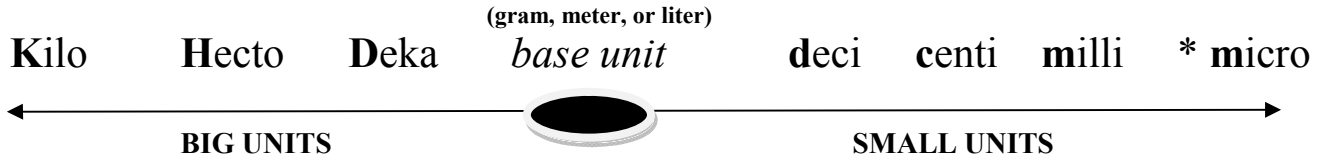


Move 3 places to the left

Bigger unit to smaller unit: 3.42 m = 3420 mm



Move 3 places to the right



Which is the larger unit?

m or cm ? _____
 cm or mm ? _____

Kg or Hg ? _____
 dL or DL ? _____

Problems:

2.5 g = _____ mg 2.5 g = _____ Kg

2.54 cm = _____ m 2.54 cm = _____ mm

2.175 Hg = _____ mg 2.175 Hg = _____ µg

Which unit should I use?

Your height? _____ Length of swimming pool? _____ Your weight? _____


Is it reasonable?


The desk is 25 mm tall? _____

You are 160 cm tall? _____

I drank 300 mL of orange juice for breakfast? _____

To help you estimate...

1 gram = 

1 Liter = 

1 meter = 

(a little over 3 ft)