

METRIC MEASUREMENT MAKES SENSE

1. What is the metric system and why is it better than the Imperial system (our system)?

A system of measurement that replaced the Imperial System (English or Standard System) and is based on multiples of 10. Standards are based on things that do not change over time and the number 10 and not arbitrary (random) standards.

2. Complete the metric prefixes in the top row and write their numerical value in the 2nd row. Complete the rest of the chart by converting the following numbers using the prefixes above.

	More than 1 whole base unit			(m L g)	Less than 1 whole base unit		
Prefix	Kilo	Hecto	Deca or Dekka	Base Unit	deci	centi	milli
Meaning	1000	100	10	1	.1	.01	.001
Convert	0.001	0.01	0.1	1	10	100	1000
Convert	5	50	500	5000	50000	500000	5000000
Convert	.0001202	.001202	.01202	.1202	1.202	12.02	120.2
Convert	12	120	1200	12000	120000	1200000	12000000
	King	Henry	Drove	by	Drinking	Chocolate	Milk

3. For each of the following **fundamental quantities**, list metric units of measurement, and a measuring tool

Fundamental Quantity	Metric units of measurement	Measuring Tool(s)
Length	meter	Ruler or meter stick
Volume	liter	Graduated cylinder or ruler
Mass	gram	Triple beam balance or scale
Time	second	Timer or (your iPhone)
Temperature	Celsius	Thermometer

4. Convert the following metric measurements: Use the table from part 1 for guidance!

1) 1000 mg = 1 g	2) 3 L = 3000 mL	3) 160 cm = 1600 mm
4) 14 km = 14000 m	5) 1809 g = 1.809 kg	6) 250 m = .250 km
7) 35 mL = .35 dL	8) 0.5 kg = 50 Dg	9) 6000 mm = .6 Dm

5. Compare the following measurements using <, >, or =.

1. 56 cm < 6 m	2. 7 g > 698 mg	3. 7500 mL > 7 L
----------------	-----------------	------------------