

Basic Mathematics for Vet Techs – Metric Units and Conversions

Grams	Liters	Meters
1 kg = 1000 g	1 kL = 1000 L	1 km = 1000 m
1 hg = 100 g	1 hL = 100 L	1 hm = 100 m
1 dag = 10 g	1 daL = 10 L	1 dam = 10 m
10 dg = 1 g	10 dL = 1 L	10 dm = 1 m
100 cg = 1 g	100 cL = 1 L	100 cm = 1 m
1000 mg = 1 g	1000 mL = 1 L	1000 mm = 1 m

Prefix	Abbreviation	Multiplier
kilo	k	1000
hecto	h	100
deka	da	10
deci	d	0.1
centi	c	0.01
milli	m	0.001
micro	u	0.000 001
nano	n	0.000 000 001

Grams	Liters	Meters
1 kg = 2.2 lbs	1 L = 33.8 fl oz	25.4 mm = 1 inch
1 oz = 28.35 g	1 gal = 3.79 L	2.54 cm = 1 inch
1 lb = 454 g	236.6 ml = 1 cup	1 m = 39.37 inch
1 g = 0.0353 oz	1 L = 1.06 qt	1 mile = 1.609 km
	15 ml = 1 tbsp	1 km = 0.621 miles
	5 ml = 1 tsp	1 foot = 0.305 m
	1 ml = 1 cc	1 m = 3.281 feet

Metric facts:

1. Two pounds of hamburger is almost a kilogram.
2. $\frac{1}{16}$ of a pound or 1 ounce is close to 30 grams.
3. A typical water bottle is around or exactly 0.5 liter.
4. A bottle of soda pop is 2 liters
5. A $\frac{1}{4}$ teaspoon is close to a milliliter.
6. A US quart (32 fl oz) is close to a liter (33.8 fl oz)
7. 1 pencil line is approximately a millimeter wide
8. The marker is close to a centimeter wide.
9. The width of an adult's hand is close to a decimeter.
10. An adult's large step is close to a meter.