

METRICS AND MEASUREMENT

Name _____

Scientists use the metric system of measurement, based on the number 10. It is important to be able to convert from one unit to another.

kilo	hecto	deca	Basic Unit gram (g) liter (L) meter (m)	deci	centi	milli
(k)	(h)	(da)		(d)	(c)	(m)
1000	100	10		.1	.01	.001
10^3	10^2	10^1		10^{-1}	10^{-2}	10^{-3}

Using the above chart, we can determine how many places to move the decimal point and in what direction by counting the places from one unit to the other.

Example: Convert 5 mL to L.

Answer: To go from milli (m) to the basic unit, liters, count on the above chart three places to the left. Move the decimal point three places to the left and 5 mL becomes 0.005 L.

Convert the following.

1. 35 mL = _____ dL

6. 4,500 mg = _____ g

2. 950 g = _____ kg

7. 25 cm = _____ mm

3. 275 mm = _____ cm

8. 0.005 kg = _____ dag

4. 1,000 L = _____ kL

9. 0.075 m = _____ cm

5. 1,000 mL = _____ L

10. 15 g = _____ mg