

# Metric Conversions

*A pneumonic device to remember the order of metric prefixes:*

## Kangaroos Hopped Down British Driveways Carrying Monkeys

Prefixes	kilo-	hecto-	deka-	(Base Unit)	deci-	centi-	mili-
Meaning	1000	100	10	1	1/10	1/100	1/1000
Abbreviation	k	h	da	m- meter l- liter g- gr am	d	c	m

**Length (base unit = meter)**      km      hm      dam      m      dm      cm      mm

**Volume (base unit = liter)**      kl      hl      dal      l      dl      cl      ml

**Mass (base unit = gram)**      kg      hg      dag      g      dg      cg      mg

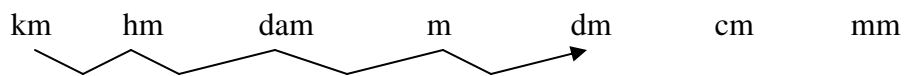
### To Convert:

If you wanted to convert 10 km into dm, follow the procedures below.

$$10 \text{ km} = \underline{\hspace{2cm}} \text{ dm}$$

km      hm      dam      m      dm      cm      mm

Place your finger on the unit given (km) and move in the direction of the unit your converting to (dm).



Since you have to move 4 places to the right, you will move the decimal 4 places to the right. (Place 0's in as place holders.)

$$10. \quad \underline{0} \quad \underline{0} \quad \underline{0} \quad \underline{0} \quad \rightarrow = 100,000 \text{ dm}$$

### Practice:

*What is the abbreviation?*

1. kilogram \_\_\_\_\_

2. hectoliter \_\_\_\_\_

3. millimeter \_\_\_\_\_

*What does the abbreviation represent?*

4. dl \_\_\_\_\_

5. dag \_\_\_\_\_

6. cm \_\_\_\_\_

*Convert the following:*

7. 50 m = \_\_\_\_\_ dm

8. 0.51 kl = \_\_\_\_\_ cl

9. 75.3 g = \_\_\_\_\_ dag

10. 678,000 mm = \_\_\_\_\_ m