

Metric conversions

636/584-6688

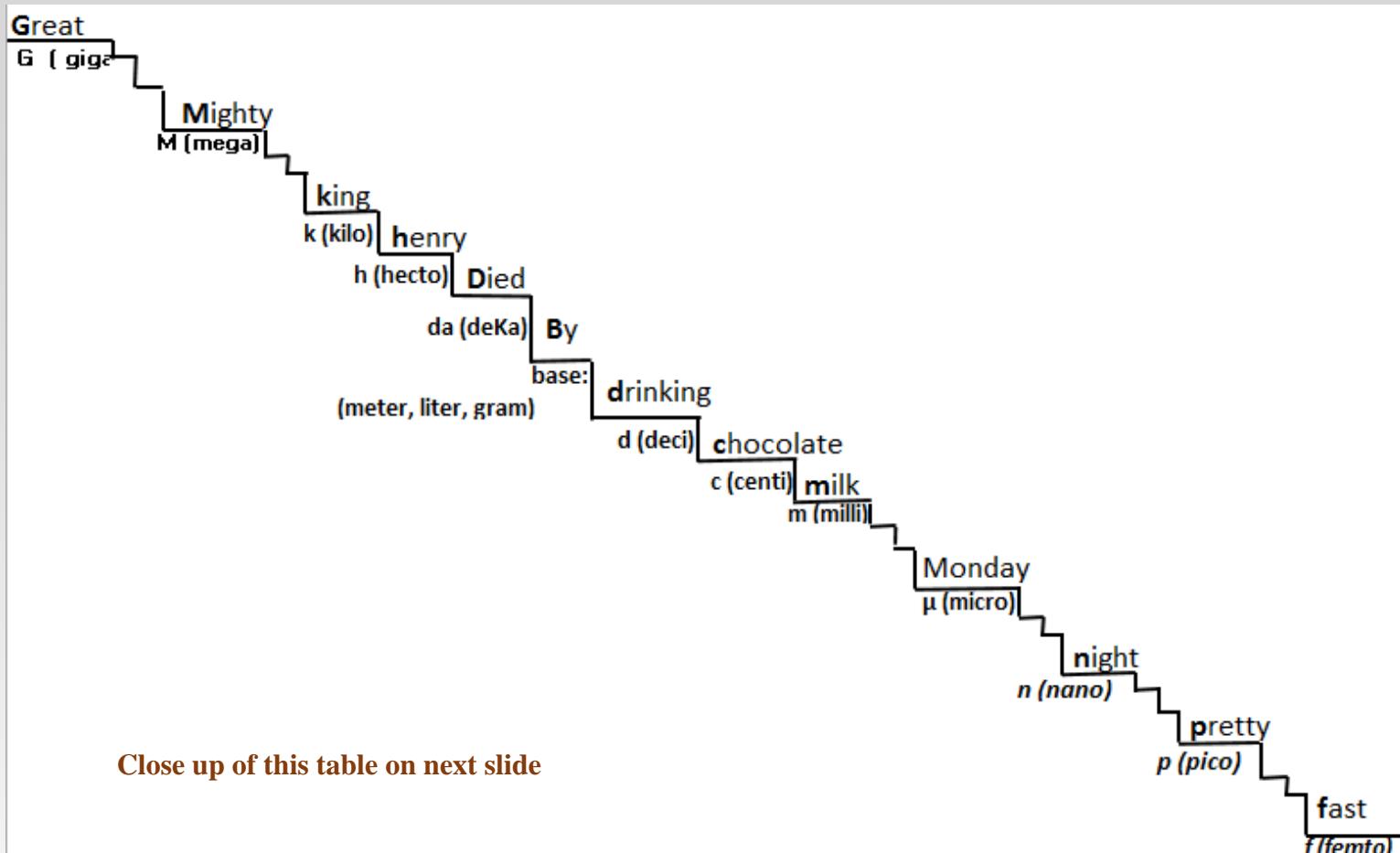
General_tutoring@eastcentral.edu

[Click to advance slides](#)



The following phrase helps arrange the prefixes for SI or metric conversions ...

Great Mighty king henry Died By drinking chocolate milk Monday night pretty fast



Giga- Mega- kilo- hecto- deKa- base deci- centi- milli- μ icro- nano- pico- femto-

Great

G (giga)

Mighty
M (mega)

king
k (kilo) henry

h (hecto) Died

da (deKa) By

meter, liter, gram, seconds

base: drinking

d (deci) chocolate

c (centi) milk

m (milli)

Monday
 μ (micro)

night
n (nano)

pretty
p (pico)

fast
f (femto)

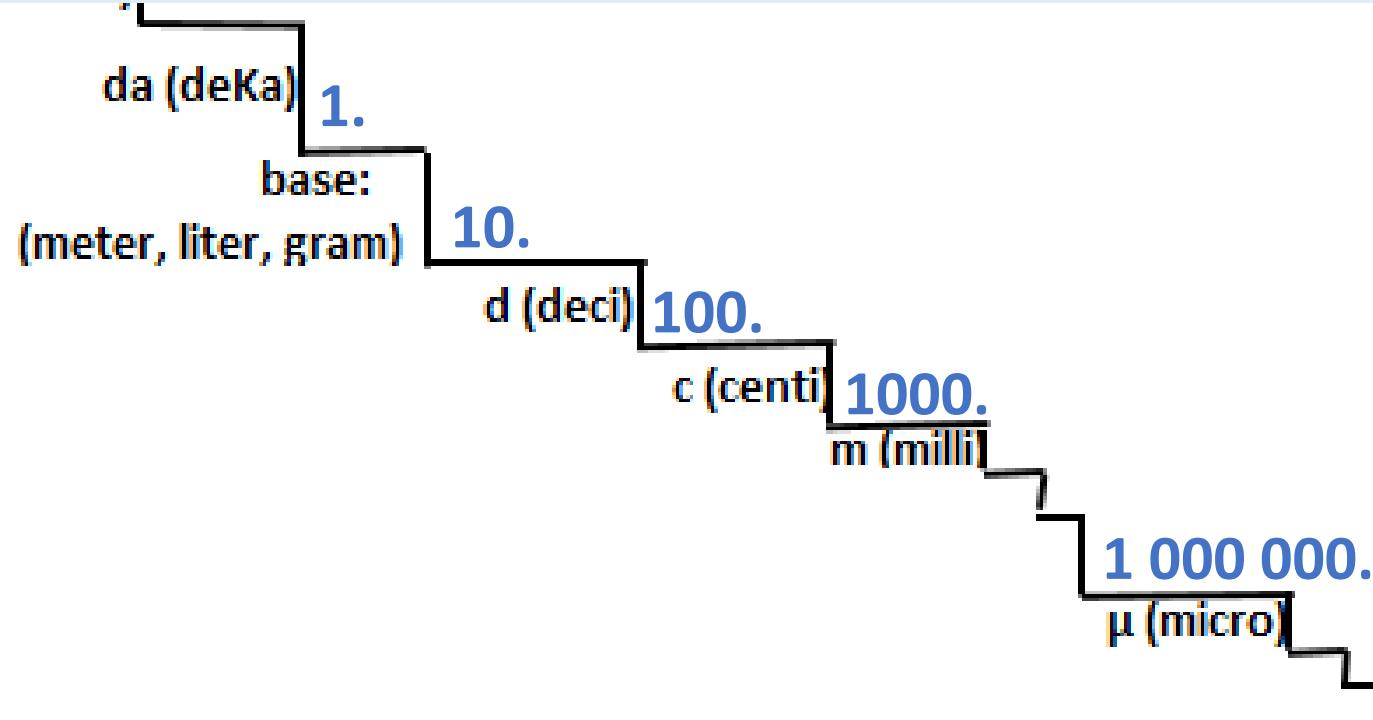
“bases” are

m (meter),
L (liter),
g (gram),
s (second)

To use metric steps:

Click to advance slides

The decimal point moves to the right,
the same number of steps down ...



$$1\text{m} = 10.\text{ dm}$$

$$1\text{m} = 100.\text{ cm}$$

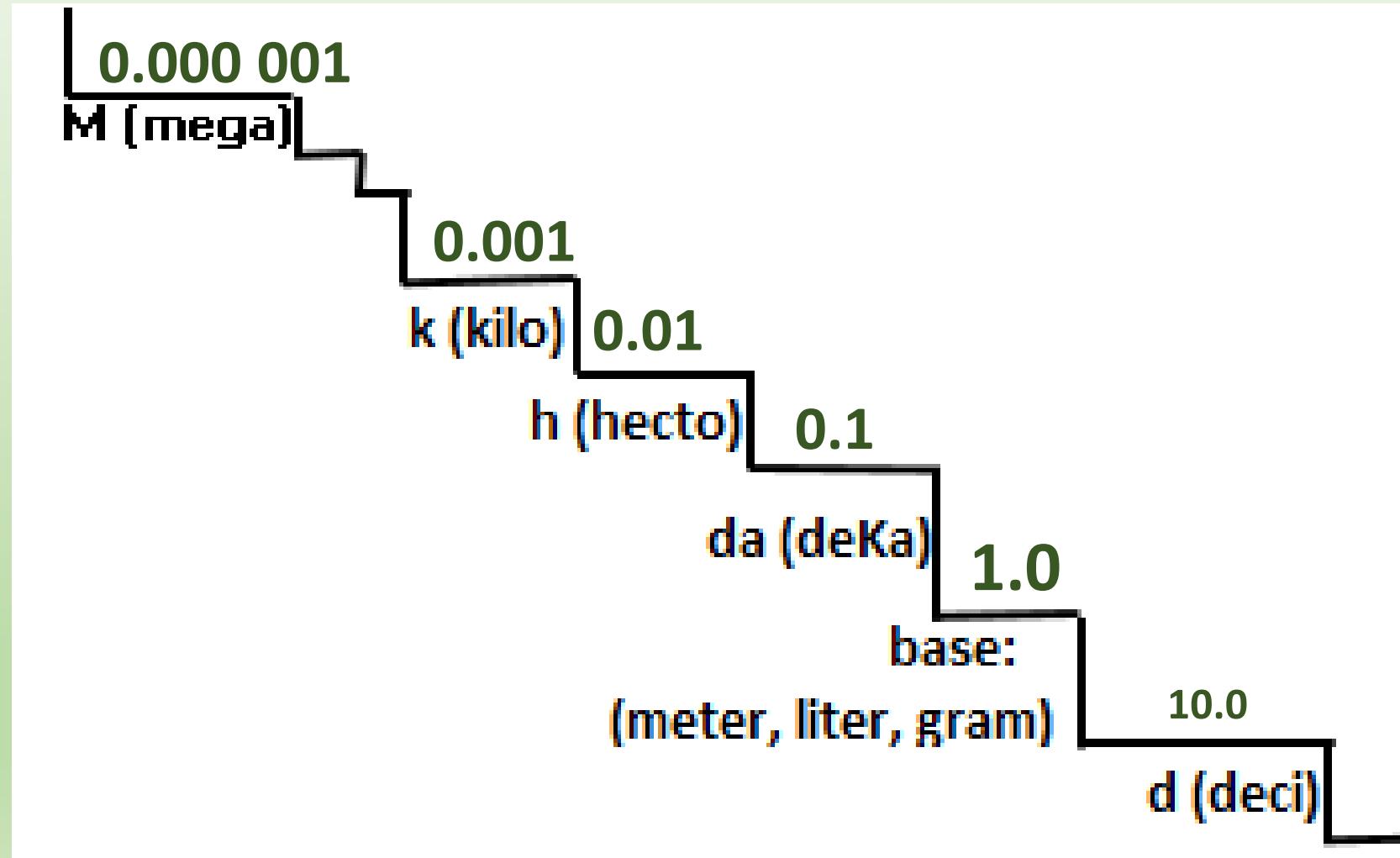
$$1\text{m} = 1000.\text{ mm}$$

$$1\text{m} = 1\,000\,000.\text{ } \mu\text{m}$$

Using the metric steps...

Click to advance slides

Decimal point moves left as quantity moves up the steps



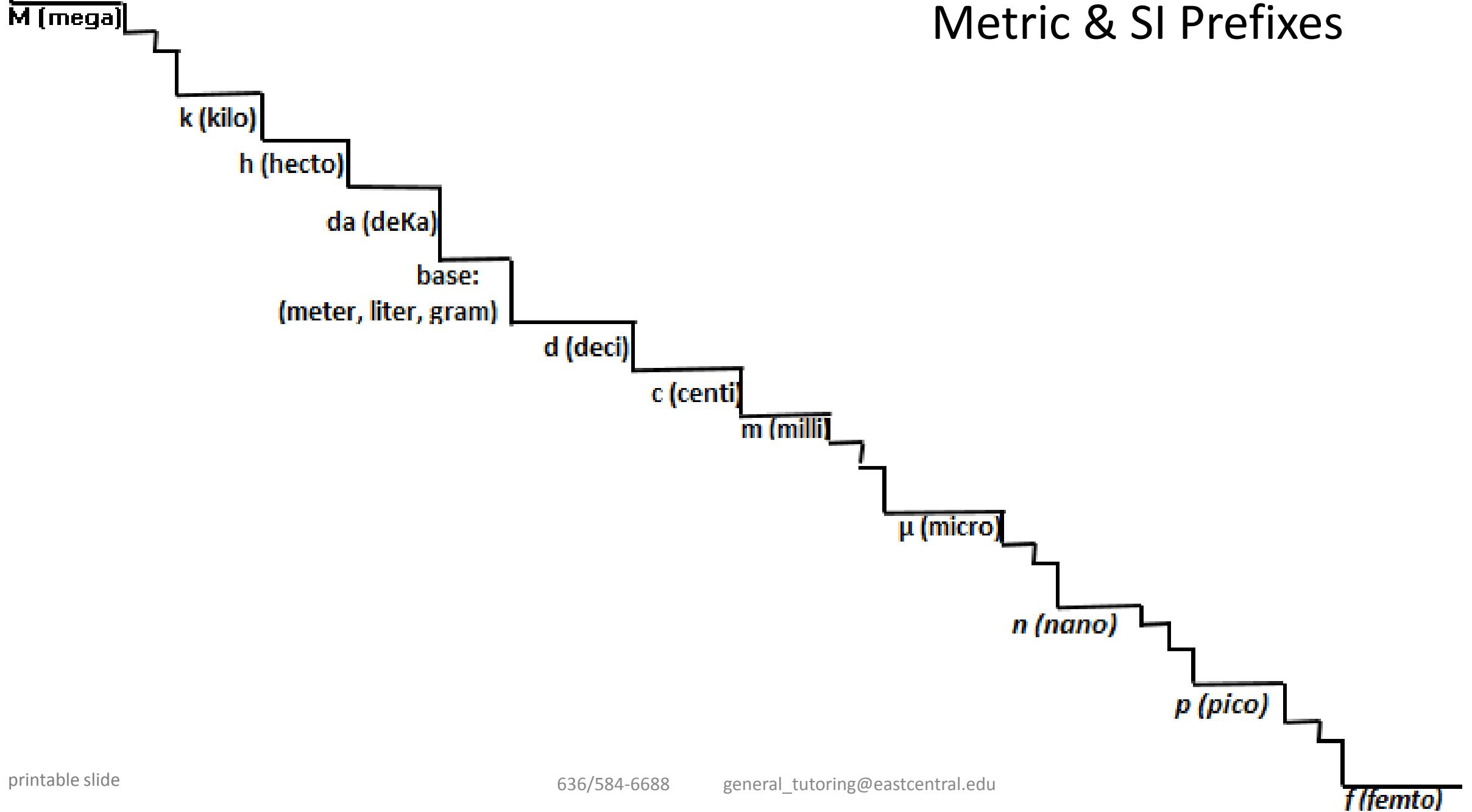
$$1m = 0.1 \text{ dam}$$

$$1m = 0.01 \text{ hm}$$

$$1m = 0.001 \text{ km}$$

$$1m = 0.000 001 \text{ Mm}$$

Metric & SI Prefixes



Metric Length Conversion practice...

1 meter = 100. cm

1cm = 10. mm

1 meter = 1000. mm

more...

1 meter = 0.001 kilometers

1 km = 1000. m

1 meter = 10. dm

Click to advance the slide

For more metric conversions see science PowerPoint: 'Metric/English conversions'.

Metric Volume Conversion practice...

1 liter = 1000. mL

more...

1 liter = 100. cL

1 kiloliter = 1000. liters

1 liter = 10. dL

1 L = 0.001 kL

1 000 000 mL = 1. kL

*1 000 000 mL = 1 000 000 cc

Metric Mass Conversion practice...

1 gram = 10 dg

More....

1 gram = 100 cg

1 g = 0.001 kg

1 gram = 1000 mg

1 kg = 1000 g

1 cg = 10 mg