

## Metric System and Conversions

Name \_\_\_\_\_

Define the following and include the symbol:

centi  $10^{-2}$  or 0.01, c    pico  $10^{-12}$ , p    micro  $10^{-6}$ ,  $\mu$

nano  $10^{-9}$ , n    milli  $10^{-3}$ , 0.001, m    mega  $10^6$ , M

kilo  $10^3$ , k    deci  $10^{-1}$ , d    deka  $10^1$ , da

What are the SI units for the following?

Mass kg    length m    volume  $m^3$

Convert the following:

82.5 mm to cm  
8.25 cm

25.2 mm to cm  
2.52 cm

0.464 L to mL

8.24 L to  $m^3$

464 mL

0.00824  $m^3$

0.834 cm to  $\mu m$

25.0 hm/hr to km/hr

$8.34 \times 10^3 \mu m$

250. km/hr

$8.25 \times 10^{-7}$  m to pm

$3.60 \times 10^{-4}$   $cm^3$  to L

$8.25 \times 10^5$  pm

0.360 L

Convert the following from our system of measurement to the metric system.

56.4 in to cm  
143 cm

8.61 oz to mL  
254 mL

65 mi/hr to km/hr  
 $1.0 \times 10^2$  km/hr

$5.2 \times 10^2$  yrs. to s  
 $1.64 \times 10^{10}$  s

42 qt. to mL

13.2 yd. to m

$3.97 \times 10^4$  mL

12.1 m