

- Current Students
 - Academic Department
 - Scroll Down
 - Science, Engineering and Architecture
 - Syllabi
 - Scroll Down
 - CHM 120 Elements..

$$\textcircled{3} \quad \textcircled{2}$$

$$3.54 \times 7.0 = 24.\underline{78}$$

$$25$$

$$\boxed{2.478} \times 10^1$$

$$2.5 \times 10^1$$

⑥

①

$$62.7683 \times 700 =$$

$$43937.81$$

$$\boxed{4}393781 \times 10^4$$

$$4. \times 10^4$$

$$\boxed{4.39} \dots \times 10^4$$

$$\boxed{4.5} \times 10^4$$

$$4.4 \times 10^4$$

$$5 \times 10^4$$

$$\frac{5.63}{7.82} = 0.719948849$$

$$7.19948849 \times 10^{-1}$$

$$7.20 \times 10^{-1}$$

$$\overset{\textcircled{3}}{(7.62 \times 10^5)} \overset{\textcircled{3}}{(6.32 \times 10^{-3})} =$$

$$7.62 \text{ EE } 5 \times 6.32 \text{ EE } (-) 3$$

EXP EXP

EE means $\times 10^x$

$$4815.84$$

$$\boxed{4.81584} \times 10^3$$

$$4.82 \times 10^3$$

2000 lbs

more - 2100 lbs
per cise

$$4.632 + 5.5 =$$

$$10.132$$

$$\begin{array}{r} 4.632 \\ 5.5 \\ \hline 10.132 \\ 10.1 \end{array}$$

tenths

$$0.0576$$
$$5.76 \times 10^{-2}$$

$$200 + 4000 + 15 =$$

$$4215$$

$$\begin{array}{r} 200 \\ 4000 \text{ thousands} \\ 15 \\ \hline 4215 \end{array}$$

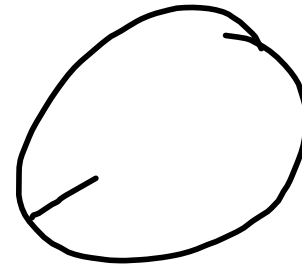
$$\begin{array}{r} 4215 \\ 4 \overline{) 4000} \end{array}$$

$$4 = 4215$$

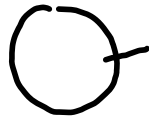
$$4.2 = 4215$$

.001 kg	.001 kL	.001 km
1 g	1 L	1 m
10 dg	10 dL	10 dm
100 cg	100 cL	100 cm
1000 mg	1000 mL	1000 mm
1×10^6 μ g	1×10^6 μ L	1×10^6 μ m
μ micro		
1×10^9 ng	1×10^9 nL	1×10^9 nm
n nano		
1×10^{12} pg	1×10^{12} pL	1×10^{12} pm
p pico		

93,000,000



47612



3765

$$\begin{array}{r} 93 \overline{) 0000000} \\ \underline{3765} \\ 47612 \\ \underline{93051377} \\ 93000600 \end{array}$$

after decimal

• 1
10 →

before decimal

← largest #

0.094

9.4×10^{-2}

5.34×10^{-3}

0.00534

∞ # of sig. figs.

① conversion factors

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

② π

③ Counting

1. A.

2.37 g $\rightarrow$ mg

" ∞ sig figs

$$\frac{2.37 \text{ g} \times \frac{1000 \text{ mg}}{1 \text{ g}}}{1} = 2370 \text{ mg}$$

If you have m to m
Conversions, you will
always get the correct
of sig. figs.

1 B. 357cL $\rightarrow$ L

$$\frac{357\text{cL} \times 1\text{ L}}{100\text{cL}} = 3.57\text{L}$$

When going from a
prefix to a prefix you
must go through the
lm, lL or lg.

1 F $5.4 \times 10^{-3} \text{ mL} \rightarrow \text{cL}$

$$\frac{5.4 \times 10^{-3} \cancel{\text{mL}} \times 1 \cancel{\text{L}} \times 100 \text{ cL}}{1000 \cancel{\text{mL}} \times 1 \cancel{\text{L}}} =$$

$$\frac{.54}{1000} = .00054 \text{ cL}$$

1.G. $8.324 \times 10^{12} \text{ nm} \rightarrow \text{Km}$

$$\frac{8.324 \times 10^{12} \text{ nm} \times 1 \text{ m} \times .001 \text{ Km}}{1 \times 10^9 \text{ nm} \times 1 \text{ m}} =$$

$$\frac{8.324 \times 10^9 \quad 8324000000}{1 \times 10^9} =$$

$$8.324 \text{ Km}$$

Quiz Mon.

① Sig figs for $\times$ or $\div$

② m to m conversion

I.C H I HW

2. $m \rightarrow e$ or $e \rightarrow m$

must be aware of sig. figs

distance $2.54 \text{ cm} = 1 \text{ in}$
 $1 \text{ in} = 2.54 \text{ cm}$

weight $454 \text{ g} = 1 \text{ lb}$

volume $946 \text{ mL} = 1 \text{ qt}$

$$2 A \quad 9.5 \text{ gal} \rightarrow \text{mL}$$

$$\checkmark 4 \text{ qt} = 1 \text{ gal}$$

$$946 \text{ mL} = 1 \text{ qt}$$

$$\frac{9.5 \text{ gal} \times 4 \text{ qt} \times 946 \text{ mL}}{1 \text{ gal} \times 1 \text{ qt}} =$$

$$35948 \text{ mL}$$

$$\boxed{3.5948} \times 10^4 \text{ mL}$$

$$3.6 \times 10^4 \text{ mL}$$