

Name Key Name \_\_\_\_\_  
 (print name) (sign name)

NA = not attempted

Please show all work for partial credit. "The Confidence Booster"

1. For the following, given the metric prefix, fill in the blank with the number which matches (3 pts)

kilo 1000 or 10<sup>3</sup> (1 pt) centi 0.01 or 10<sup>-2</sup> (1 pt) milli 0.001 (abbreviated m) or 10<sup>-3</sup> (1 pt)

2. To convert Celsius to Kelvin, fill in the blank with the equation (2 pts)

Wrong sign - 1/2 pt  $K = ^\circ C + (273.15)$  (2 pt) Wrong # - 1/2 pt  
 (left off K) no pts off

3. For the following numbers, fill in the blank with the number of significant figures. (6 pts)

35.200 5 (3 pt) significant figures 0.00152 3 (3 pt) significant figures  
 (got 2 pt only if something else followed it.)

4. Convert 24.3 mg / Liter to kg per mL. Show all work for full credit. (9 pts)

2 pt  $\frac{24.3 \text{ mg}}{\text{Liter}} \times \frac{1 \text{ g}}{1000 \text{ mg}}$  (2 pt)  $\times \frac{\text{kg}}{1000 \text{ g}}$  (2 pt)  $\times \frac{\text{Liter}}{1000 \text{ ml}}$  (2 pt) =

$2.43 \times 10^{-8} \frac{\text{kg}}{\text{ml}}$   
 3 sig. fig.

infinite sig. fig.

1/2 pt Math  
1/2 pt sig fig

Zero pts wrong # + no work

3 sig. fig.

Extra Credit (from Chapter 2)

For the symbol given below fill in the blanks (3 pts)

<sup>30</sup>P # protons 15 # electrons (for a neutral atom) 15 # neutrons 30 - 15 = 15

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1. For the following, given the metric prefix, fill in the blank with the number which matches (3 pts)

(c) centi 0.01 or  $10^{-2}$  (k) kilo 1000 or  $10^3$  (m) milli 0.001 or  $10^{-3}$   
*(1 pt each)*

1. To convert Celsius to Kelvin, fill in the blank with the equation (2 pts)

$K = ^\circ C + 273.15$   
*wrong sign - 2 pt* *wrong # - 1 pt*  
*left off no pts off*

3. For the following numbers, fill in the blank with the number of significant figures. (6 pts)

100.2 4 significant figures 0.0170 3 significant figures  
*3 pt* *3 pt* *1/2 pt math* *1/2 pt sig fig*

4. Convert 24.3 kg / mL to mg per Liter. Show all work for full credit. (9 pts)

$$\frac{24.3 \text{ kg}}{\text{mL}} \times \frac{1000 \text{ g}}{1 \text{ kg}} \times \frac{1000 \text{ mg}}{1 \text{ g}} \times \frac{1000 \text{ mL}}{1 \text{ L}} = 2.43 \times 10^{10} \frac{\text{mg}}{\text{Liter}}$$

*3 sig fig* *2 pt* *2 pt* *2 pt* *2 pt*  
*only if something comes after this* *infinite sig. fig* *zero pts* *wrong # + showed no work*

Extra Credit (from Chapter 2)

For the symbol given below fill in the blanks (3 pts)

$^{35}_{17}\text{Cl}$  # protons 17 # electrons (for a neutral atom) 17 # neutrons  $35 - 17 = 18$

Name Key (print name) Name \_\_\_\_\_ (sign name)

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Please show all work for partial credit. "The Confidence Booster"

1. For the following, given the metric prefix, fill in the blank with the number which matches (3 pts)

1 pt each

kilo 1000 or  $10^3$     centi 0.01 or  $10^{-2}$     milli 0.001 or  $10^{-3}$

2. To convert Celsius to Kelvin, fill in the blank with the equation (2 pts)

Wrong sign - 1 pt

$K = ^\circ C + 273.15$

Wrong # - 1/2 pt

(left off) no pts off

3. For the following numbers, fill in the blank with the number of significant figures. (6 pts)

4002.0 5 significant figures    0.0001 1 significant figures

Zero pts wrong # + showed no work

4. Convert 24.3 inches to kilometers (2.54 cm = inch) Show all work for full credit. (9 pts)

24.3 inches  $\times \frac{2.54 \text{ cm}}{1 \text{ inch}}$   $\times \frac{\text{meter}}{100 \text{ cm}}$   $\times \frac{\text{km}}{1000 \text{ m}}$  =

$6.17 \times 10^{-4} \text{ km}$

3 sig fig

no pts. if nothing written after this

1/2 pt. math

infinite sig. fig.

1/2 pt. sig fig

Extra Credit (from Chapter 2)

For the symbol given below fill in the blanks (3 pts)

<sup>40</sup>Ca # protons 20 # electrons (for a neutral atom) 20 # neutrons 40 - 20 = 20

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N/A = not attempted

Please show all work for partial credit. "The Confidence Booster"

1. For the following, given the metric prefix, fill in the blank with the number which matches (3 pts)

milli 0.001 or  $10^{-3}$     centi 0.01 or  $10^{-2}$     kilo 1000 or  $10^3$

1 pt each

2. To convert Celsius to Kelvin, fill in the blank with the equation (2 pts)

wrong sign - 1/2 pt

$K = ^\circ C + 273.15$

wrong # - 1/2

left off no pts off

3. For the following numbers, fill in the blank with the number of significant figures. (6 pts)

25.02 4 significant figures 3 pt

0.010 2 significant figures 3 pt

zero pts wrong # showed no work

4. Convert 24.3 kilometers to inches (2.54 cm = 1 inch) Show all work for full credit. (9 pts)

$24.3 \text{ km} \times \frac{1000 \text{ m}}{1 \text{ km}} \times \frac{100 \text{ cm}}{1 \text{ m}} \times \frac{\text{inch}}{2.54 \text{ cm}} = 9.57 \times 10^5 \text{ inches}$

2 pt  
only if something comes after

3 sig fig

infinite sig fig

1/2 pt math  
2 pt sig fig

3 sig fig

Extra Credit (from Chapter 2)

For the symbol given below fill in the blanks (3 pts)

$^{14}_7\text{N}$  # protons 7 # electrons (for a neutral atom) 7 # neutrons  $14 - 7 = 7$

Name \_\_\_\_\_ Name \_\_\_\_\_  
(print name) (sign name)

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1. For the following, given the metric prefix, fill in the blank with the number which matches (3 pts)

kilo \_\_\_\_\_ centi \_\_\_\_\_ milli \_\_\_\_\_

2. To convert Celsius to Kelvin, fill in the blank with the equation (2 pts)

\_\_\_\_\_

- 3 For the following numbers, fill in the blank with the number of significant figures. (6 pts)

35.200 \_\_\_\_\_ significant figures      0.00152 \_\_\_\_\_ significant figures

4. Convert 24.3 mg / Liter to kg per mL. Show all work for full credit. (9 pts)

Extra Credit (from Chapter 2)

For the symbol given below fill in the blanks (3 pts)

$^{30}_{15}\text{P}$  # protons \_\_\_\_\_ # electrons (for a neutral atom) \_\_\_\_\_ # neutrons \_\_\_\_\_

Name \_\_\_\_\_ Name \_\_\_\_\_  
(print name) (sign name)

Please show all work for partial credit. "The Confidence Booster"

1. For the following, given the metric prefix, fill in the blank with the number which matches (3 pts)

centi \_\_\_\_\_ kilo \_\_\_\_\_ milli \_\_\_\_\_

1. To convert Celsius to Kelvin, fill in the blank with the equation (2 pts)

\_\_\_\_\_

- 3 For the following numbers, fill in the blank with the number of significant figures. (6 pts)  
4

100.2 \_\_\_\_\_ significant figures      0.0170 \_\_\_\_\_ significant figures

4. Convert 24.3 kg / mL to mg per Liter. Show all work for full credit. (9 pts)

Extra Credit (from Chapter 2)

For the symbol given below fill in the blanks (3 pts)

$^{35}_{17}\text{Cl}$  # protons \_\_\_\_\_ # electrons (for a neutral atom) \_\_\_\_\_ # neutrons \_\_\_\_\_

Name \_\_\_\_\_ Name \_\_\_\_\_  
(print name) (sign name)

Please show all work for partial credit. "The Confidence Booster"

1. For the following, given the metric prefix, fill in the blank with the number which matches (3 pts)

kilo \_\_\_\_\_ centi \_\_\_\_\_ milli \_\_\_\_\_

2. To convert Celsius to Kelvin, fill in the blank with the equation (2 pts)

\_\_\_\_\_

3. For the following numbers, fill in the blank with the number of significant figures. (6 pts)

4002.0 \_\_\_\_\_ significant figures      0.0001 \_\_\_\_\_ significant figures

4. Convert 24.3 inches to kilometers (2.54 cm = inch) Show all work for full credit. (9 pts)

Extra Credit (from Chapter 2)

For the symbol given below fill in the blanks (3 pts)

$^{40}_{20}\text{Ca}$  # protons \_\_\_\_\_ # electrons (for a neutral atom) \_\_\_\_\_ # neutrons \_\_\_\_\_

Name \_\_\_\_\_ Name \_\_\_\_\_  
(print name) (sign name)

Please show all work for partial credit. "The Confidence Booster"

1. For the following, given the metric prefix, fill in the blank with the number which matches (3 pts)

milli \_\_\_\_\_ centi \_\_\_\_\_ kilo \_\_\_\_\_

2. To convert Celsius to Kelvin, fill in the blank with the equation (2 pts)

\_\_\_\_\_

- 3 For the following numbers, fill in the blank with the number of significant figures. (6 pts)

25.02 \_\_\_\_\_ significant figures      0.010 \_\_\_\_\_ significant figures

4. Convert 24.3 kilometers to inches (2.54 cm = 1 inch) Show all work for full credit. (9 pts)

Extra Credit (from Chapter 2)

For the symbol given below fill in the blanks (3 pts)

${}^{14}_{7}\text{N}$  # protons \_\_\_\_\_ # electrons (for a neutral atom) \_\_\_\_\_ # neutrons \_\_\_\_\_