

## Significant Digits Worksheet

Determine the correct number of significant digits for each of the following measurements and express them in scientific notation. Remember the units!

- A. 6023.1 cm      \_\_\_\_\_      \_\_\_\_\_
- B. 3401 kg      \_\_\_\_\_      \_\_\_\_\_
- C. 654.10 km      \_\_\_\_\_      \_\_\_\_\_
- D. 10200 ml      \_\_\_\_\_      \_\_\_\_\_
- E. 2000.02 g      \_\_\_\_\_      \_\_\_\_\_
- F. 0.0000045 mg      \_\_\_\_\_      \_\_\_\_\_
- G. 0.0040 g/ml      \_\_\_\_\_      \_\_\_\_\_
- H. 1200 cm      \_\_\_\_\_      \_\_\_\_\_
- I. 1200.0 ml      \_\_\_\_\_      \_\_\_\_\_
- J. 1200.000 g      \_\_\_\_\_      \_\_\_\_\_
- K. 0.000050001 ml      \_\_\_\_\_      \_\_\_\_\_
- L. 3400000 km      \_\_\_\_\_      \_\_\_\_\_
- M. 104500 g      \_\_\_\_\_      \_\_\_\_\_
- N. 903 ml      \_\_\_\_\_      \_\_\_\_\_
- O. 2.1170 mg      \_\_\_\_\_      \_\_\_\_\_

Perform the following calculations to the proper number of significant digits. Remember the units! (Express answer in scientific notation when helpful.)

A)  $34.5 \text{ cm} + 6.002 \text{ cm} + 10.2 \text{ cm} =$  \_\_\_\_\_

B)  $4.001 \text{ ml} - .005 \text{ ml} =$  \_\_\_\_\_

C)  $6.1 \text{ g} + 3.0005566 \text{ g} =$  \_\_\_\_\_

D)  $45.58 \text{ g} - 0.659 \text{ g} + 1.4 \text{ g} =$  \_\_\_\_\_

- E)  $5.21 \text{ cm} + 3.1 \text{ cm} = \underline{\hspace{2cm}}$
- F)  $0.00045 \text{ cm} + 0.002 \text{ cm} + 1.020 \text{ cm} = \underline{\hspace{2cm}}$
- G)  $4001 \text{ ml} - 233.005 \text{ ml} = \underline{\hspace{2cm}}$
- H)  $0.92886 \text{ g} + 3.0005566 \text{ g} = \underline{\hspace{2cm}}$
- I)  $0.58 \text{ g} + 0.659 \text{ g} + 1.4 \text{ g} = \underline{\hspace{2cm}}$
- J)  $10990.9 \text{ cm} + 310.22 \text{ cm} = \underline{\hspace{2cm}}$
- K)  $34.5 \text{ cm} \times 6.0 \text{ cm} \times 1002 \text{ cm} = \underline{\hspace{2cm}}$
- L)  $4.50 \text{ cm} \times 3000 \text{ cm} \times 0.0021 \text{ cm} = \underline{\hspace{2cm}}$
- M)  $8.95 \text{ g} / 25 \text{ ml} = \underline{\hspace{2cm}}$
- N)  $4.0001 \text{ g} / 2 \text{ cm}^3 = \underline{\hspace{2cm}}$
- O)  $46.68 \text{ g} / 34.6 \text{ ml} = \underline{\hspace{2cm}}$
- P)  $50 \text{ g} / 2.5 \text{ ml} = \underline{\hspace{2cm}}$
- Q)  $56.000 \text{ cm} \times 32.1 \text{ cm} \times 4.50 \text{ cm} = \underline{\hspace{2cm}}$
- R)  $0.0521 \text{ m} \times 0.031 \text{ m} \times 0.081 \text{ m} = \underline{\hspace{2cm}}$
- S)  $6 \text{ g} / 3.000 \text{ ml} = \underline{\hspace{2cm}}$
- T)  $6.0 \text{ g} / 3.000 \text{ ml} = \underline{\hspace{2cm}}$
- U)  $6.00 \text{ g} / 3.000 \text{ ml} = \underline{\hspace{2cm}}$
- V)  $6.000 \text{ g} / 3.000 \text{ ml} = \underline{\hspace{2cm}}$
- W)  $6.0000 \text{ g} / 3.000 \text{ ml} = \underline{\hspace{2cm}}$
- X)  $6.00000 \text{ g} / 3.000 \text{ ml} = \underline{\hspace{2cm}}$
- Y)  $1.000 \text{ g} + 2.5000004 \text{ g} + 21.000 \text{ g} + 1.00 \text{ g} + 36.67687 \text{ g} + 2.2222222 \text{ g} +$   
 $1.000000000000001 \text{ g} = \underline{\hspace{2cm}}$
- Z)  $15.99 \text{ m} \times 6.0 \text{ m} \times 19 \text{ m} = \underline{\hspace{2cm}}$