

## Significant Figures – Another Worksheet

1. Give the number of significant figures in each of the following.

- a) 10.0005 g                      b) 0.003423 mm                      c) 2900 ft                      d)  $8.9 \times 10^5$  L

2. Determine the answer for each of the following. Be sure to use the correct number of significant figures.

- a) 
$$\begin{array}{r} 27.34 \\ 6.90 \\ + 13.124 \\ \hline \end{array}$$
                      b) 
$$\begin{array}{r} 2.8023 \\ - 4.762 \\ \hline \end{array}$$
                      c)  $0.32 \times 14.50 \times 120 =$                       d)  $24.1 / 0.005 =$

3. Round each of the following to 3 significant figures.

- a. 707.5 \_\_\_\_\_                      c. 0.0003350 \_\_\_\_\_                      e.  $18.95 \times 10^{21}$  \_\_\_\_\_  
b. 2,300.2 \_\_\_\_\_                      d. 10.26730 \_\_\_\_\_

4. Calculate the following using the correct number of significant figures.

- a) 
$$\begin{array}{r} 2.34 \times 10^{47} \\ + 9.2 \times 10^{46} \\ \hline \end{array}$$
                      b) 
$$\begin{array}{r} 9132.0 \\ - 1.6 \times 10^3 \\ \hline \end{array}$$

5. Calculate the following using the correct number of significant figures.

- a)  $(1.54 \times 10^{58})(3.5 \times 10^{60})$                       b)  $(7.9 \times 10^{34}) / (8.32 \times 10^{23})$

6. Express the following numbers in scientific notation.

- a) 810,000 g                      b) 0.000634 g                      c) 60,000,000 g

7. State the number of significant digits in the following measurements.

- a) 3218 kg                      b) 60.080 kg                      c) 0.000534 kg

8. Add/Subtract as indicated and round the answer using the correct number of significant digits.

- a)  $85.26 \text{ g} + 4.7 \text{ g}$                       b)  $1.07 \text{ km} + 0.608 \text{ km}$                       c)  $186.4 \text{ kg} - 57.83 \text{ kg}$

9. Multiply/Divide as indicated and round the answer using the correct number of significant digits.

- a)  $(5,108 \text{ m})(4.2107 \text{ m})$                       c)  $(2.6 \times 10^4 \text{ cm})(9.4 \times 10^3 \text{ cm})$

b)  $(1.67 \times 10^{-2} \text{ km}) \div (8.5 \times 10^{-6} \text{ km})$