

Significant Figures Worksheet

1) Determine the number of significant figures in each of the following:

a) _____ 75.02mm

d) _____ 0.0049 g

b) _____ 18.90 mL

e) _____ 150 cm

c) _____ 12 test tubes

f) _____ 150. Cm

2) Re-write the quantity 827,000,000,000,000 picoseconds to show:

a) 1 sig. fig. _____

b) 2 sig. figs. _____

c) 3 sig. figs. _____

d) 4 sig. figs. _____

e) 5 sig. figs. _____

3) Rewrite the quantity 0.0031904 kg to show:

a) 1 sig. fig. _____

b) 2 sig. figs. _____

c) 3 sig. figs. _____

4) Round each of the following to 3 significant figures:

a) 16.8477 L _____

b) 5.6732 _____

c) 0.14986 L _____

d) 861.85 _____

e) 4.203×10^4 km _____

f) 5.0981×10^{-3} _____

g) 0.00318756 m _____

h) 0.09025011 _____

5) Perform the following calculations and report the results with the correct number of significant figure and proper units.

$$\begin{array}{r} 0.0677 \\ 48.1 \\ +\underline{82.7655} \end{array}$$

$$\begin{array}{r} 43.8316 \\ - \underline{29.5706} \end{array}$$

$$\begin{array}{r} \underline{8506} \times 0.02 \\ 6.524 \end{array}$$

$$0.0222 \times 0.7000 \times 8.702$$