

Scientific Notation, Significant Figures, Metric Conversions

Work out the problem and answer it in the space provided.

Do Not Use a Calculator

These should be done in your head or worked out on paper.

How Many Significant Figures

1) 2.3065003 g _____

2) .0325400 m _____

3) 12500 ml _____

4) 63200.0 s _____

How Many Significant Figures should be in the answer?

5) 600.01 m multiplied by 2.3 m _____

6) .25300 m divided by 60000 m _____

Put these numbers in Proper Scientific Notation.

7) 125000 m _____

8) 6020000000000000000000000000000 atoms _____

9) 125.00000 m _____

10) .000056 g _____

Convert these amounts to the following units.

11) 375 m to _____ mm

12) 32.5 dm to _____ km

13) 25.33 dag to _____ dg

14) 4438 cg to _____ g

Add and Subtract using Significant Figure Rules

15) 4050g + 27g = _____

16) 4050g - 23g = _____

Change these Scientific Notation numbers to different powers of ten.

17) $4.27 \times 10^{553} \text{ kg} = \underline{\hspace{10em}} \times 10^{556} \text{ kg}$

18) $5.74 \times 10^{-2} \text{ kg} = \underline{\hspace{10em}} \times 10^{-5} \text{ kg}$

Multiply or divide without taking them out of Scientific Notation.

19) 3.0×10^{221} multiplied by 3.0×10^{41} is $\underline{\hspace{10em}}$

20) 9.0×10^{525} divided by 3.0×10^{550} is $\underline{\hspace{10em}}$

Add or subtract without taking them out of Scientific Notation.

21) 4.6×10^{55} plus 3.0×10^{54} is $\underline{\hspace{10em}}$

22) 3.633×10^{24} minus 4×10^{23} is $\underline{\hspace{10em}}$