

Science 10
Significant Figures and Metric Conversions

Write the number of the significant figures of the following on the line provided,

1) _____ 670 mg

2) _____ 0.0045g

3) _____ 5005.0 cm

4) _____ 3.250km

5) _____ 43.050L

6) _____ 0.345 m

7) _____ 0.0540g

8) _____ 300 900L

9) _____ 2.000 cm

10) _____ 6720.45 m

11) _____ 50 0000km

12) _____ 0.0005g

Solve the following mathematical operations and place the answers in the correct number of significant figures.

Add:

13) $12.250 \text{ cm} + 9.2\text{cm} + 7.40 \text{ cm} =$

14) $1.500\text{g} + 4.34 \text{ g} + 0.006 \text{ g} =$

15) $30.63 \text{ cm} + 6.6 \text{ cm} + 3.786 \text{ cm} =$

Subtract:

16) $44.373 \text{ mg} - 0.2\text{mg} =$

17) $18.527 \text{ g} - 9.2156 \text{ g} =$

18) $7.00\text{mg} - 1.467 \text{ mg} =$

Multiply:

19) $0.444 \text{ cm} \times 52.562 \text{ cm} =$

20) $13\ 000 \text{ cm} \times 11.54 \text{ cm} =$

21) $7.02 \text{ m} \times 0.143 \text{ m} \times 555.5\text{m} =$

Divide:

22) $9.8 \text{ g} / 8.66 \text{ mL} =$

23) $19.8 \text{ g} / 2.081 \text{ mL} =$

24) $2.50 \text{ mi} / 0.04 \text{ hr} =$

Rounding: Round each of the following to 3 and 4SD

25) 3.14159

26) 742 396

27) 0.0028956

28) 2589700

29) 231.45

30) 0.048752