

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