

## Units and Significant Figures 2

1. State the number of significant figures in the quantities below
  - (a) 1.5 /1
  - (b) 6.125 /1
  - (c) 23.80 /1
  - (d) 0.0052 /1
  - (e) 8.01 /1
2. State why 0.047 has 2 significant figures even though there are four digits. /1
3. If a calculation involves dividing 1.1 by 0.0312, explain why 35.3 is not an appropriate answer.  
*Ignore units for this question.* /2
4. If a calculation involves adding 1.1 to 0.0312, explain why 1.1312 is not an appropriate answer.  
*Ignore units for this question.* /2
5. Show why multiplying a speed (in  $\text{m s}^{-1}$ ) by a time (in s) gives a distance (in m). /1
6. Write the answer to these calculations, using correct s.f. (significant figures) and units.
  - (a) 0.010 N multiplied by 52 s
  - (b) 13.5 N plus 6 N
  - (c) 72 N divided by 113 kg
  - (d) 10.31 kg plus 121 kg
  - (e) 312 kg multiplied by  $14 \text{ m s}^{-1}$
  - (f)  $2034 \text{ m s}^{-1}$  plus  $1150 \text{ m s}^{-1}$
  - (g) 630.5 N minus 36.5 N
  - (h) 240 m multiplied by 0.03 m

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