

# Converting units of capacity

Convert between millilitres and litres using decimals up to 3 places



Challenge 1

1 Write each capacity using decimal notation.

- a i  $\frac{4}{10} l$       ii  $\frac{4}{100} l$       iii  $\frac{4}{1000} l$   
 b i  $\frac{9}{10} l$       ii  $\frac{9}{100} l$       iii  $\frac{9}{1000} l$

Example

$\frac{1}{10} l = 0.1 l$   
 $\frac{1}{100} l = 0.01 l$   
 $\frac{1}{1000} l = 0.001 l$

2 Convert each capacity to litres using decimal notation.

- a i 300 ml      ii 30 ml      iii 3 ml  
 b i 700 ml      ii 70 ml      iii 7 ml  
 c i 1600 ml      ii 160 ml      iii 16 ml

Example

100 ml = 0.1 l  
 10 ml = 0.01 l  
 1 ml = 0.001 l

3 Convert each capacity to millilitres.







- a i 0.8 l      ii 0.08 l      iii 0.008 l  
 b i 4.5 l      ii 4.05 l      iii 4.005 l

Challenge 2

1 Convert the millilitres of rain water in each bucket to litres then round your answer to 1 decimal place.

Example

4545 ml = 4.545 l  $\approx$  4.5 l

a 5727 ml       b 8070 ml       c 3704 ml   
 d 16364 ml       e 18095 ml       f 11507 ml 

2 Convert each capacity to millilitres.

- a 4.9 l      b 4.49 l      c 9.04 l      d 0.94 l      e 40.909 l      f 94.004 l

3 For each statement, work out the answer to each part and write whether the statement is true or false.





- a  $\frac{1}{2}$  of 3 l >  $\frac{1}{4}$  of 5 l      b  $\frac{1}{2}$  of 1.5 l <  $\frac{1}{4}$  of 2 l  
 c  $\frac{1}{3}$  of 1 l >  $\frac{2}{3}$  of 900 ml      d  $\frac{1}{4}$  of 1 l <  $\frac{1}{5}$  of 750 ml  
 e  $\frac{1}{3}$  of 1.8 l >  $\frac{3}{4}$  of 1200 ml      f  $\frac{4}{5}$  of 4 l < 10 000 ml



4 Copy and complete this pattern as far as you can go.

10 litres – 999 ml = 9.001 litres  
 9.001 litres – 999 ml =      litres  
      litres – 999 ml =      litres

5 You pour one or two of the amounts of water on the right into an empty 1 litre measuring jar. Write in litres the ten different amounts of water that your jar could now have in it.

 250 ml       0.1 l       50 ml       0.25 l

Challenge 3

Dr Davies has four measuring jars labelled A, B, C and D and four test tubes labelled 1, 2, 3 and 4. Each measuring jar is filled with a different liquid and each test tube is filled with a different chemical. She transfers the liquid from one measuring jar and the chemical from one test tube into an empty jug and mixes them together. How many different combinations of liquid and chemical can she make?

