

# LO: To divide decimals by 10, 100 and 1000.

## Beautiful Challenge

1. Copy out and complete the following:

$325 \div 10 =$

$550 \div 100 =$

$5400 \div 1000 =$

$3010 \div 100 =$

$4505 \div 100 =$

$3205 \div 10 =$

2. This number has been divided by 100. What was the original number?

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3. Copy and complete the following calculations:

$5100 \div \underline{\quad} = 5.1$

$5132 \div \underline{\quad} = 51.32$

$513 \div \underline{\quad} = 5.13$

$134 \div \underline{\quad} = 1.34$

$1230 \div \underline{\quad} = 1.23$

$1.2 \div \underline{\quad} = 0.12$

4. True or False?  $5151 \div 100 = 515.1$

5. Use the digit cards to create answers to the calculations below. Which calculation cannot be answers? You can use the cards more than once.



A.  $7,132 \div 10 =$

B.  $7,140 \div 100 =$

C.  $721 \div 10 =$

6. These children are dividing numbers. Who is correct? Give a reason for your answer.



Hafsa

I think that  
 $7,452 \div 100 = 74.52$



Isabel

I think that  
 $2,750 \div 1,000 = 27.5$



Sinead

I think that  
 $7,452 \div 100 = 745.2$

I think that  
 $2,750 \div 1,000 = 2.75$



Gabriel

7. These children are thinking of numbers. Can you work out which number each person is thinking of?



Flo

When multiplied by  
1,000, my number  
becomes 6,520.



Lucy

When multiplied by  
10 the number  
becomes 7.6.

## Marvellous Challenge

1. Copy out and complete the following:

$1238 \div 1000 =$

$36277 \div 1000 =$

$1238 \div 10 =$

$13820 \div 100 =$

$37622 \div 100 =$

$362.7 \div 100 =$

2. This number has been divided by 100. What is the original number?

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3. Copy and complete the following calculations:

$5443 \div \underline{\hspace{2cm}} = 54.43$

$12340 \div \underline{\hspace{2cm}} = 12.34$

$\underline{\hspace{2cm}} \div 100 = 54.033$

$\underline{\hspace{2cm}} \div 100 = 12.034$

$54430 \div 1000 = \underline{\hspace{2cm}}$

$12304 \div 10 = \underline{\hspace{2cm}}$

4. Dividing by 1000 can also help to convert some measurements from one unit to another. Are the conversions below correct?

$1670\text{g} = 16.7\text{ kg}$

$5689\text{m} = 568.9\text{km}$

5. Use the digit cards to create answers to the calculations below. Which calculation cannot be answers? You can use the cards more than once.

7 2 3 0 6 .

A.  $7,023 \div 100 =$

B.  $623 \div 1,000 =$

C.  $30.8 \div 10 =$

6. These children are converting units of measure. Who is correct? Give a reason for your answer.



I think that 3,050m can be converted to 3.05km



I think that 5,690g can be converted to 5.609kg

I think that 3,050m can be converted to 30.5km



I think that 5,690g can be converted to 5.69kg



7. These children are thinking of numbers. Can you work out which number each person is thinking of?



My number is between 10 and 30. When multiplied by 100 the number becomes 2,155.



My number is between 5 and 10. When multiplied by 1,000 the number becomes 7,185.

## Splendid Challenge

1. Copy out and complete the following:

$699 \div 300 =$

$46.6 \div 20 =$

$6400.6 \div 200 =$

$2303 \div 100 =$

$3203 \div 100 =$

$96009 \div 3000 =$

2. Rosie has made 4509ml of squash. She drinks 1312ml. How many litres of squash is left?
3. Jack needs to cycle 52459m for charity. He rests after 24362m. How many kilometres has Jack got left to cycle?

4. Copy and complete the following calculations:

$42.304 \times \underline{\hspace{2cm}} = 84608$

$69909 \div \underline{\hspace{2cm}} = 23.303$

$48602 \div 200 = \underline{\hspace{2cm}}$

$64090 \div 1000 = \underline{\hspace{2cm}}$

$4109 \div \underline{\hspace{2cm}} = 41.09$

$\underline{\hspace{2cm}} \times 200 = \underline{\hspace{2cm}}$

5. True or False?  $8202 \div 2000 = 41.01$

6. Complete the digit cards to create answers to two of the calculations below. Which calculation cannot be answered using your digit cards?



A.  $423.1 \div 10 =$

B.  $4,826 \div 200 =$

C.  $4,512 \div 100 =$

7. These children are dividing numbers. Who is correct? Give a reason for your answer.



When I calculate  $2,802 \div 200$ , I will divide by 100 and double the answer to get 56.04.



When I calculate  $4,608 \div 2,000$ , I will divide by 1,000 and halve the answer to get 2.304.

When I calculate  $2,802 \div 200$ , I will divide by 100 and halve the answer to get 14.01.



When I calculate  $4,608 \div 2,000$ , I will divide by 1,000 and double the answer to get 9.216.



8. These children are thinking of numbers. Can you work out which number each person is thinking of? Give three possible answers and use the units they have used.



My number has 3 decimal places and is between 7kg and 8kg. When converted to grams, the hundreds digit is 6 and the tens digit is 9.



My number has 3 decimal places and is between 4L and 5L. When converted to millilitres, the tens digit is 2 and the ones digit is 8.