

Maths Arithmetic & Reasoning Activities

Multiplying and dividing by 10,100 and 1000

Watch this [clip](#) to help you revise multiplying and dividing by 10, 100, and 1000.

Multiplying and Dividing by 10, 100 and 1000

10 000	1000	100	10	1	●	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
					●			

Multiplying

X 10 digits move LEFT 1 space
 X 100 digits move LEFT 2 spaces
 X 1000 digits move LEFT 3 spaces



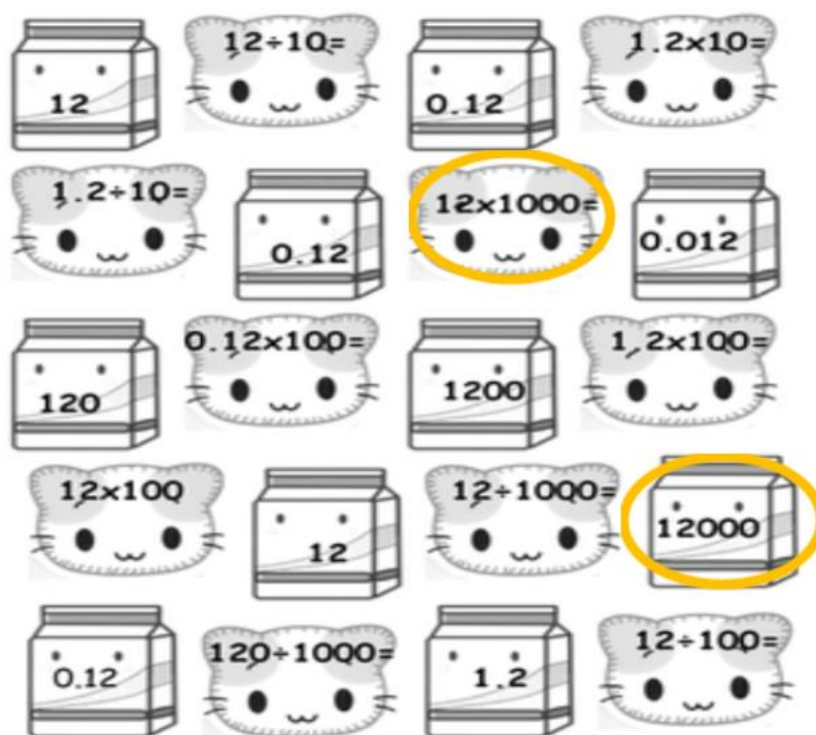
Dividing

÷ 10 digits move RIGHT 1 space
 ÷ 100 digits move RIGHT 2 spaces
 ÷ 1000 digits move RIGHT 3 spaces



Thousands	Hundreds	Tens	Units	Decimal Point	Tenths	Hundredths	Thousandths	Ten-Thousandths	Hundred thousandths
				.					
				.					
				.					
				.					
				.					
				.					
				.					

P4L: Multiply and divide by 10, 100 and 1000 with decimals. **Circle the matching cat with the milk carton in the same colour.** Use the above grid to help you work out the answers. One has been completed for you.



Warming up*

Use the place value grid to help you

Multiplying and Dividing by 10, 100 and 1000

10 000	1000	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$

Multiplying

X 10
X 100
X 1000

digits move LEFT 1 space
digits move LEFT 2 spaces
digits move LEFT 3 spaces



Dividing

÷ 10
÷ 100
÷ 1000

digits move RIGHT 1 space
digits move RIGHT 2 spaces
digits move RIGHT 3 spaces



Q1. $37 \times 10 =$

Q2. $2.6 \times 10 =$

Q3. $5 \times 4 \times 10 =$

Q4. $4.6 \times 100 =$

Q5. $0.9 \div 100 =$

Q6. $101 \times 1,000 =$

Q7. $100 \times 412 =$

Q8. $98.31 \div 10 =$

Q9. $0.04 \div 10 =$

Q10. $20.61 \times 10 =$

Q11. $0.1 \div 100 =$

Q12. $100 \times 100 =$

Q13. $1.28 \times 100 =$

Q14. $343.1 \div 1,000 =$

Feeling more confident **

Q1.

Circle the number that is **10 times** greater than nine hundred and seven.

9,700

907

9,007

970

9,070

Q2.

Write in the missing number.

3400

÷

=

100

Q3.

Write the missing number to make this **division** correct.

75 ÷

= 7.5

Q4.

Complete these calculations.

15

×

100

=

×

10

=

1500

÷

100

=

150

150

÷

10

=

Q5.

Here are five number cards.

0.47

10

100

1000

4.07

Use **four** of the cards to complete these calculations.

$$47 \div \boxed{} = \boxed{}$$

$$\boxed{} \times \boxed{} = 40.7$$

Q6.

$$\boxed{} \times 10 = 350.5$$

$$460 \div \boxed{} = 4.6$$

$$2.3 \times \boxed{} = 2,300$$

Ready for a challenge***

1. If Ayaan gets £1.25 pocket money a week, how much will he get in 10 weeks?
2. 10 children share 1240 gummy bears. How many gummy bears do they each get?
3. 100 books cost £165. How much does one book cost?
4. A book is 5mm thick. How thick would 1000 books be?
5. $1 \square 31 \div 1000 = 1.131$

Remember to show your working out.

Answers

Maths Arithmetic & Reasoning Activity Multiplying and dividing by 10,100 and 1000

P4L:



Warming up*

Q1.

370

[1]

Q2.

26

[1]

Q3.

200

[1]

Q4.

460

[1]

Q5.

0.009

[1]

Q6.

101,000

[1]

Q7.

41,200

[1]

Q8.

9.831

[1]

Q9.

0.004

[1]

Q10.

206.1

[1]

Q11.

0.001

Accept equivalent fractions, e.g.

$$\frac{1}{1000}$$

[1]

Q12.

10 000

[1]

Q13.

128

[1]

Q14.

0.3431

[1]

Feeling more confident**

Q1.

The correct number circled as shown:

9,700

907

9,007

970

9,070

Accept alternative unambiguous positive indications, e.g. number ticked.

[1]

Q2.

34

[1]

Q3.

10

[1]

Q4.

Award **TWO** marks for all four values correct as shown:

$$15 \times 100 = \begin{array}{|c|} \hline 150 \\ \hline 0 \\ \hline \end{array}$$

$$\begin{array}{|c|} \hline 150 \\ \hline \end{array} \times 10 = 1500$$

$$\begin{array}{|c|} \hline 1500 \\ \hline 0 \\ \hline \end{array} \div 100 = 150$$

$$150 \div 10 = \begin{array}{|c|} \hline 15 \\ \hline \end{array}$$

If the answer is incorrect, award **ONE** mark for three values correct.

Up to 2

[2]

Q5.

$$47 \div \begin{array}{|c|} \hline 100 \\ \hline \end{array} = \begin{array}{|c|} \hline 0.47 \\ \hline \end{array}$$

AND

$$\begin{array}{|c|} \hline 4.07 \\ \hline \end{array} \times \begin{array}{|c|} \hline 10 \\ \hline \end{array} = 40.7$$

Numbers within calculations may be given in either order.

[1]

Q6.

All three correct

35.05

100

1000

2

or

Any two correct

1

[2]

Ready for a challenge***

1. If Ayaan gets 1.25p pocket money a week, how much will he get in 10 weeks?
12.50
2. 10 children share 1240 gummy bears. How many gummy bears do they each get?
124
3. 100 books cost £165. How much does one book cost?
£16.50
4. A book is 5mm thick. How thick would 1000 books be?
5000mm
5. **1131** \div 1000 = 1.131