



THIRD SPACE
LEARNING



HELLO!

Today we are going to revise multiplying and
dividing by 10, 100 and 1,000

Arithmetic Warm Up

You should be able to
do all of these mentally
- without any working
out

1. $502 + 100 =$

2. $17 \times 100 =$

3. $512 \div$

$= 51.2$

Revision – multiplying by 10, 100 and 1,000

Look at this place value chart – what can you tell me about place value?

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones

1. Write 213 in the chart.
2. **Multiply** this number by 10 – what happens to the digits?
3. What happens if you multiply 213 by 100?
4. $213 \times 1,000 =$

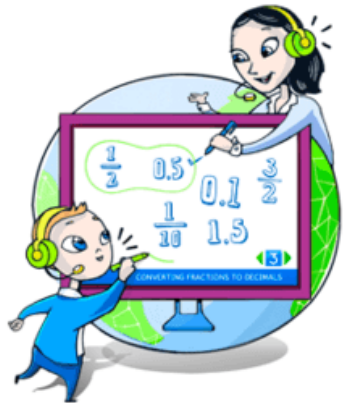
Revision – dividing by 10, 100 and 1,000

Look at this place value chart – what can you tell me about place value?

thousands	hundreds	tens	ones	●	tenths	hundredths	thousandths
				●			
				●			
				●			

- Write 73 in the chart.
- Divide** this number by 10 – what happens to the digits?
- What happens if you divide 73 by 100?
- $73 \div 1,000 =$

Revision on multiplying and dividing by 10, 100 and 1,000



Today we are going to revise how to:



use place value to **multiply** by 10, 100 and 1,000



use place value to **divide** by 10, 100 and 1,000

Question 1

 Complete

Here are six cards.

$\times 10$

$\times 100$

$\times 1000$

$\div 10$

$\div 100$

$\div 1000$

Use a card to complete each calculation.


$$5.3 \quad \boxed{} = 0.53$$

$$5.3 \quad \boxed{} = 5300$$

$$5.3 \quad \boxed{} = 0.053$$

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Question 2

 Use the space provided to complete the following question.

Ben is thinking of a number.
He multiplies it by 1,000
and then divides it by 10.
The answer is 567.
What was his number?



1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Let's review:



I can understand place value and **multiply** numbers by 10, 100 and 1,000



I can understand place value and **divide** numbers by 10, 100 and 1,000

Draw a circle around the smiley face to show how you feel about what we've just been doing.



CHALLENGE

 Use the space provided to complete the following question.

1. What do you notice?
2. What do you know?
3. Can you show your working out?
4. How could you extend the question?

Use the clues to find the mass of the following parcels.

Parcel C is 100 times lighter than parcel A.

Parcel A is 10 times heavier than parcel B.



Parcel A is

kg

Parcel B is

kg

Multiplying whole numbers by 1,000

When a whole number is multiplied by 1,000, the digits move 3 places to the left. ← ← ←

$$23 \times 1,000 = ?$$

10000s	1000s	100s	10s	1s
			2	3

$$23 \times 1,000 = 23,000$$

10000s	1000s	100s	10s	1s
2	3	0	0	0

Complete the sentence:

23,000 has ten thousands, thousands,

hundreds, tens and ones.

You can write 0 as a placeholder.

Dividing whole numbers by 1,000

When a whole number is divided by 1000, the digits move 3 places to the right → → →

$$38 \div 1,000 = ?$$

10s	1s	0.1s	0.01s	0.001s
3	8			

10s	1s	0.1s	0.01s	0.001s
	0	0	3	8

$$38 \div 1,000 = 0.038$$

Complete the sentence:

0.038 has ones, tenths,
 hundredths and thousandths.

You can write 0 as a placeholder.

Multiplying and dividing whole numbers by 1,000

How did the digits move when you were multiplying and dividing?



Write numbers to complete the sentences.

1. 1,000 has zeroes.

2. When you multiply by 1,000 the digits move places to the left.

3. When you divide by 1,000 the digits move places to the right.