Maths Home Learning at St Pauls Primary School

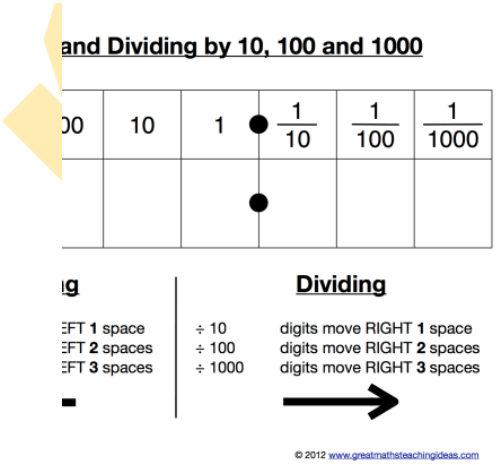
Key Instant Recall Facts

Year 5 AND 6 Spring 1

Target: I can Multiply and divide by 10, 100, 1000

By the end of this half term, children should know the following facts. The aim is to recall these facts instantly.

7 × 10= 70	30 × 10 = 300	0.8 × 10 = 8
10 × 7= 70	10 × 30 = 300	10 × 0.8 = 8
70 ÷ 7= 10	300 ÷ 30 = 10	8 ÷ 0.8 = 10
70÷ 10 = 7	300 ÷ 10 = 30	8 ÷ 10 = 0.8
6 × 100= 600	40 × 100 = 4000	0.2 × 10 = 2
100 × 6= 600	100 × 40 = 4000	10 × 0.2 = 2
600 ÷ 6= 100	4000 ÷ 40 = 100	2 ÷ 0.2 = 10
600÷ 100 = 6	4000 ÷ 100 = 40	2 ÷ 10 = 0.2



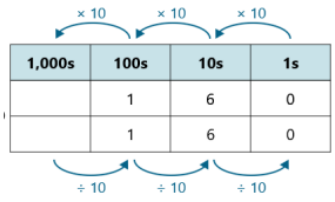
These are just examples of the facts for this term. Children should be able to answer these questions in any order, including missing number questions e.g. 10 × ◯ = 5 or ◯ ÷ 10 = 60.

KEY VOCABULARY

What is 5 **multiplied by** 10?
What is 10 **times** 0.9?
What is 700 **divided by** 70?
hundreds, tens, units
tenths, hundredths

Top tips

Top tips to help with learning:
The secret to success is practising **little** and **often**. Use time wisely.
It is important to refer to the digits, rather than the decimal point, moving when multiplying or dividing by 10, 100 or 1000.



How to multiply or divide by 10, 100, 1000 using place value – KS3 Maths – BBC Bitesize
Vrbo | GB-EN 16x9 | Vignettes | Nature Wknd 10s
Multiplying by 10, 100 and 1000
ITP Moving Digits - Mathsframe
Interactive Math Lesson | Multiplying Whole Numbers by 10, 100, and 1,000

Multiplying by 10 and 100

Look at how place value grids have been used to solve these multiplications.

3.1 x 10 = ?

Th	H	T	O •	1/10	1/100
		3	1 •	0	

3.1 x 100 = ?

Th	H	T	O •	1/10	1/100
	3	1	0 •	0	

3.1 x 1000 = ?

Th	H	T	O •	1/10	1/100
3	1	0	0 •	0	

Use the multiplications to help you complete these sentences:

The digits move ..... places to the left when we multiply by 10.

The digits move ..... places to the left when we multiply by 100.

The digits move ..... places to the left when we multiply by 1000.

Then use the examples to help you solve:

Th	H	T	O •	1/10	1/100
			2 •	8	

2.8 x 10 = ____

Th	H	T	O •	1/10	1/100
			6 •	4	

6.4 x 10 = ____

Dividing by 10, 100 and 1000

Here are some examples of how place value grids can be used to divide by 10, 100 and 1000:

9600 ÷ 10 = 960

Th	H	T	O •	1/10	1/100
9	6	0	0 •		
→	9	6	0 •		

9600 ÷ 100 = 96

Th	H	T	O •	1/10	1/100
9	6	0	0 •		
→	→	9	6 •		

9600 ÷ 1000 = 9.6

Th	H	T	O •	1/10	1/100
9	6	0	0 •		
→	→	→	9 •	6	

Think:
What similarities and differences are there between multiplying and dividing by 10, 100 and 1000?

Now look at these place value grids and match the correct calculation to each one:

Th	H	T	O •	1/10	1/100
5	6	0	0 •		
	5	6	0 •		

Th	H	T	O •	1/10	1/100
5	6	0	0 •		
		5	6 •		

Th	H	T	O •	1/10	1/100
5	6	0	0 •		
			5 •	6	

5600 ÷ 10 = ____

5600 ÷ 1000 = ____

5600 ÷ 100 = ____

Multiplying by 10, 100 & 1000

1. Use place value charts to help you carry out the calculations below. The first one has been done for you.

a) 2.3 x 10 = 23

Th	H	T	O	Tth	Hth
			2	3	
		2	3		

2.3 x 100 = 230

Th	H	T	O	Tth	Hth
			2	3	
	2	3	0		

2.3 x 1000 = 2300

Th	H	T	O	Tth	Hth
			2	3	
2	3	0	0		

b) 4.5 x 10 =

Th	H	T	O	Tth	Hth
			4	5	

4.5 x 100 =

Th	H	T	O	Tth	Hth
			4	5	

4.5 x 1000 =

Th	H	T	O	Tth	Hth
			4	5	

Dividing by 10, 100 & 1000

1. Use the place value charts to help you carry out the calculations below. The first one has been done for you.

a) 322 ÷ 10 = 32.2

Th	H	T	O	Tth	Hth	Thth
	3	2	2			
		3	2	2		

322 ÷ 100 = 3.22

Th	H	T	O	Tth	Hth	Thth
	3	2	2			
			3	2	2	

322 ÷ 1000 = 0.322

Th	H	T	O	Tth	Hth	Thth
	3	2	2			
			0	3	2	2

b) 547 ÷ 10 =

Th	H	T	O	Tth	Hth	Thth
	5	4	7			

547 ÷ 100 =

Th	H	T	O	Tth	Hth	Thth
	5	4	7			

547 ÷ 1000 =

Th	H	T	O	Tth	Hth	Thth
	5	4	7			