



# Maths Learning Letter

wb 20<sup>th</sup> April

Year 6- Chontel & Miri's Maths Group

## Maths this week

The focus for this week's learning is **place value**. Use paper and a pencil to complete the tasks in the Word document.



You could also have a look at the Slides on Google Classroom to help you understand the tasks.

### Lesson 1

#### Learning question:

Can I apply my knowledge of place value?

#### Success criteria:

- I can read numbers up to millions.
- I can identify the value of a digit in a number to millions and including decimal numbers.
- I can add and subtract 10,100 and 1000 to a number.

**Task one:** Children to use a place value grid to help them read numbers to millions and to help them identify the value of an underlined digit.

435,826								
What is this number?								
Millions			Thousands			Ones		
HM	TM	M	HTh	TTh	Th	H	T	U
			4	3	5	8	2	6

For example, Children should be able to recognise that the value of the digit 5 is 5000 because it is in the thousands column.

**Task two:** Children can use the place value grid to help them add/subtract 10/100 and 1000 to a number. For example,  $47,715 + 10$ . The only column that will change will be the tens column only. The rest of the digits will stay the same.

47,715								
$47,715 + 10 = 47,725$								
Millions			Thousands			Ones		
HM	TM	M	HTh	TTh	Th	H	T	U
				4	7	7	1	5
				4	7	7	2	5

**Task 1** - Identify the value of the 9 in each number.

#### Example

2 9 6, 6 1 3  
90,000  
or 90 thousands

**Task 2** - Add and subtract 10,100 and 1000 to the numbers in the grid.

Once you have finished both tasks, use the answer sheet to mark your work.

## Lesson 2

### Learning question:

Can I apply my knowledge of place value?

### Success criteria:

- I can identify the value of a digit in a number to millions including decimals
- I can partition numbers to millions
- I can write numbers to millions in figures
- I can write numbers to millions in words.

**Task one:** Children to use their place value grids, to partition the digits in each number. This can then help them to write the number in words.

#### **Example**

**3,548,915** = three million, five hundred and forty-eight thousand, nine hundred and fifteen

**3,548,915** = 3,000,000 + 500,000 + 40,000 + 8,000 + 900 + 10 + 5

Millions			Thousands			Ones		
HM	TM	M	HTh	TTh	Th	H	T	U
	3	5	4	8	9	1	5	
	3	0	0	0	0	0	0	0
		5	0	0	0	0	0	0
			4	0	0	0	0	0
				8	0	0	0	0
					9	0	0	0
						1	0	0
								5

↓

Drop the digit when partitioning.

**Task two:** Continue to use the place value grid to read words and write them in figures.

**Task 1** - Write the numbers in words and partition each digit.

**Task 2** - Write the words into figures and partition the digits.

Once you have finished both tasks, use the answer sheet to mark your work.

If you need any help with your work this week, email

office@keyworth.southwark.sch.uk and address your message to Chontel and Miri.

Remember to keep working through your revision books as well!

Good luck with your learning this week! 😊

## Lesson 3

### Learning question:

Can I round whole and decimal numbers

### Success criteria:

- I can identify the value of a digit in a number
- I can identify the multiples a number falls between
- I can round whole numbers to the nearest 100 / 1000 / 10,000/ 100,000.
- I can round to the nearest 2dp.

**Task one and two:** Children need to refer to the steps to success to help them round numbers to help them round to 100 and 1000 in the first task and tenth and hundredth in the second task.

#### Rounding

Example - round to the nearest 1,000

Step 1 - Write the number you are rounding in columns

M	HTh	TTh	Th	H	T	U/Is
2	3	6	8	4	9	2

Step 2 - Identify the column that you are rounding your number to and record the same digit in the row above in red pen

M	HTh	TTh	Th	H	T	U/Is
			8			
2	3	6	8	4	9	2

Step 3 - Add 1 more to the column below the identified digit in red pen. If the digit is a 9, think about how that will change the column to the left

M	HTh	TTh	Th	H	T	U/Is
			8			
2	3	6	8	4	9	2
			9			

**Task 1** - Look at the population of people in UK cities. Round each population to the nearest 100 or 1000.

**Task 2** - Look at the world city populations. Round each population to the nearest tenth or hundredth.

Once you have finished both tasks, use the answer sheet to mark your work.

Step 4 - Write in red pen a zero as a place holder in every column after your recorded digits

M	HTh	TTh	Th	H	T	U/Is
			8	0	0	0
2	3	6	8	4	9	2
			9	0	0	0

Step 5 - In pencil, record the rest of the digits ensuring that they are exactly the same as those in your original number

M	HTh	TTh	Th	H	T	U/Is
			8	0	0	0
2	3	6	8	4	9	2
2	3	6	9	0	0	0

Step 6 - Highlight the digit in the column to the right of your identified column and remember the rules for rounding!

M	HTh	TTh	Th	H	T	U/Is
			8	0	0	0
2	3	6	8	4	9	2
2	3	6	9	0	0	0

## Lesson 4

### Learning question:

Can I consolidate my understanding of rounding whole and decimal numbers?

### Success criteria:

- I can identify the value of a digit in a number
- I can identify the multiples a number falls between
- I can round whole numbers to the nearest 100 / 1000 / 10,000 / 100,000.
- I can round to the nearest 2dp.

**Task one:** During this lesson you are going to follow the same steps you followed in the previous lesson.

#### Rounding

Example - round to the nearest 1,000

Step 1 - Write the number you are rounding in columns

M	HTH	TTH	TH	H	T	U/1s
2	3	6	8	4	9	2

Step 2 - Identify the column that you are rounding your number to and record the same digit in the row above in red pen

M	HTH	TTH	TH	H	T	U/1s
			8			
2	3	6	8	4	9	2

Step 3 - Add 1 more to the column below the identified digit in red pen. If the digit is a 9, think about how that will change the column to the left

M	HTH	TTH	TH	H	T	U/1s
			8			
2	3	6	8	4	9	2
			9			

**Task 1** - Round the numbers to the nearest tenth or hundredth.

Once you have finished the task, use the answer sheet to mark your work.

Step 4 - Write in red pen a zero as a place holder in every column after your recorded digits

M	HTH	TTH	TH	H	T	U/1s
			8	0	0	0
2	3	6	8	4	9	2
			9	0	0	0

Step 5 - In pencil, record the rest of the digits ensuring that they are exactly the same as those in your original number

M	HTH	TTH	TH	H	T	U/1s
2	3	6	8	0	0	0
2	3	6	8	4	9	2
2	3	6	9	0	0	0

Step 6 - Highlight the digit in the column to the right of your identified column and remember the rules for rounding!

M	HTH	TTH	TH	H	T	U/1s
2	3	6	8	0	0	0
2	3	6	8	4	9	2
2	3	6	9	0	0	0

## Lesson 5

### Learning question:

Can I multiply and divide numbers by 10, 100 and 1000?

### Success criteria:

- I can identify the value of a digit in a number
- I can multiply numbers by 10, 100 and 1000
- I can divide numbers by 10, 100 and 1000

When we multiply a number the number gets bigger therefore the digits move to the left.

When we divide a number, the number gets smaller therefore the digits move to the right.

We can use a place value grid to help us.

Examples:

<b>13.07 ÷ 10 =</b>								
Th	H	T	U	.	t	h	th	
		1	3	.	0	7		
		1		.	3	0	7	
				.				

<b>287 × 100 =</b>								
Millions			Thousands			Ones		
HM	TM	M	HTh	TTh	Th	H	T	U
						2	8	7
			2	8	7	0	0	

**Task 1** -Look at the distances and convert each distance to centimetres (x100) or millimetres (x1000).

Can you convert the distances?

Distance	Centimetres (x100)	Millimetres (x1,000)
23m		
412m		

**Task 2**- Look at the products on sale. Multiply each number by 10 / 100 / 1000.

How much money would be made if 10, 100 or 1000 of each of these products were sold by the ice-cream van?

Product	Quantity of 10 (x10)	Quantity of 100 (x100)	Quantity of 1000 (x1000)
Ice cream with flake £0.79 each			
Tubs £1.09 each			

**Task 3**- Find 10% or 1% of an amount by dividing by 10 or 100.

Can you find 10% and 1% of the amounts?

Amount	10% (÷10)	1% (÷100)
£4,500		
£23,200		
£12.35		

Once you have finished the tasks, use the answer sheet to mark your work.