



# **Briercliffe Primary School**

**Years 3 & 4**

**Maths - How can you help your  
child at home?**



# Why should we support mathematics at home?

Reasoning and arithmetic enables children to solve everyday problems and improves memory.



# Basic Skills

The following are basic skills that we teach in school:

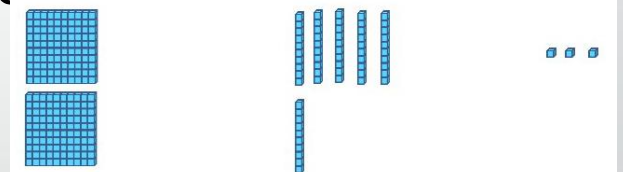
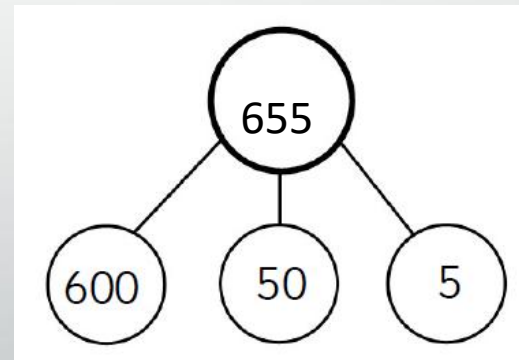
- Counting
- Representing numbers
- Addition and subtraction facts
- Multiplication and division facts
- Multiply and divide by 10, 100 and 1000

# Place Value (the value of number)

Why is it important?

Place value is the foundation of our number system. We need to be able to determine a digit's worth based on its position. It allows us to represent and compare numbers of any size and enable access to the four operations (+ - x ÷).

What does it look like in school?



hundreds	tens	ones

The digit 6 is in the  place.

The digit  is in the ones place.

The digit 3 stands for .

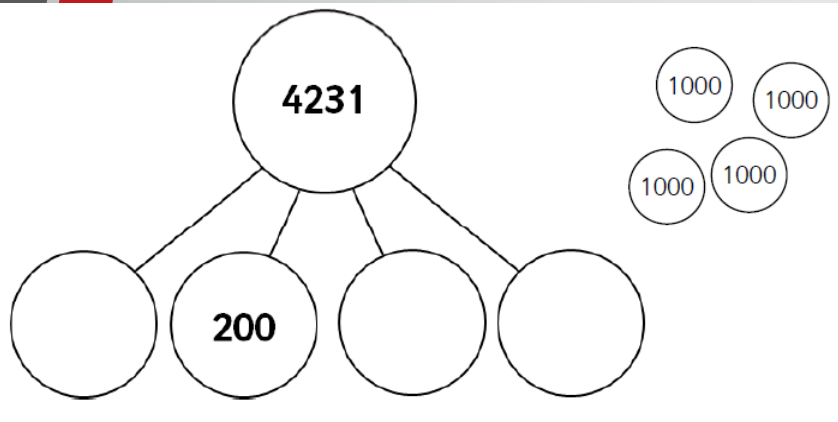
The digit  stands for 60.

# Place Value (the value of number)

## Why is it important?

Place value is the foundation of our number system. We need to be able to determine a digit's worth based on its position. It allows us to represent and compare numbers of any size and enable access to the four operations (+ - x ÷).

## What does it look like in school?



8427      8724      8472

is the smallest number       is the greatest number

thousands	hundreds	tens	ones

The digit 1 is in the  place.

The digit  is in the ones place.

The digit 2 has a value of .

The digit  has a value of 40.

# Addition Year 3

What does it look like in school?

How can I help at home?

Remind children to start adding the ones first.

Think about number bonds to help them to add for example:  $9+1$  and then  $+5$  more.

Don't forget to carry the ones into tens and the tens into the hundreds and count these when adding.

	H	T	O	
	3	7	9	
+	5	6	6	
	<hr/>			
	9	4	5	
	<hr/>			
	1	1		

# Addition Year 4

What does it look like in school?

How can I help at home?

Remind children to start adding the ones first.

Think about number bonds to help them to add for example:  $9+1$  and then  $+5$  more.

Don't forget to carry the ones into tens, the tens into the hundreds and hundreds into thousands and count these when adding.

	Th	H	T	O
	2	3	6	7
+	1	4	8	5
	<hr/>			
	3	8	5	2
	<hr/>			
		1	1	

# Subtraction Year 3

What does it look like in school?

How can I help at home?

Remind children to subtract the ones first.

Think about number bonds to help them to subtract

*For example: 12-2 and then subtract 4 more*

Don't forget to exchange the tens and hundreds when subtracting.

A handwritten subtraction problem on a grid. The problem is  $246 - 186$ . The result  $60$  is written below a horizontal line. Above the numbers, the columns are labeled H, T, and O. Red numbers indicate the steps: a red '3' is written above the '4' in the tens column, and a red '12' is written above the '8' in the tens column. The '4' and '8' are crossed out, and a '2' is written in the tens column. The '6' in the ones column is crossed out, and a '0' is written in the ones column.

	H	T	O	
	<del>4</del>	<del>8</del>	2	
-	1	8	6	
	<hr/>			
	2	4	6	

# Subtraction Year 4

What does it look like in school?

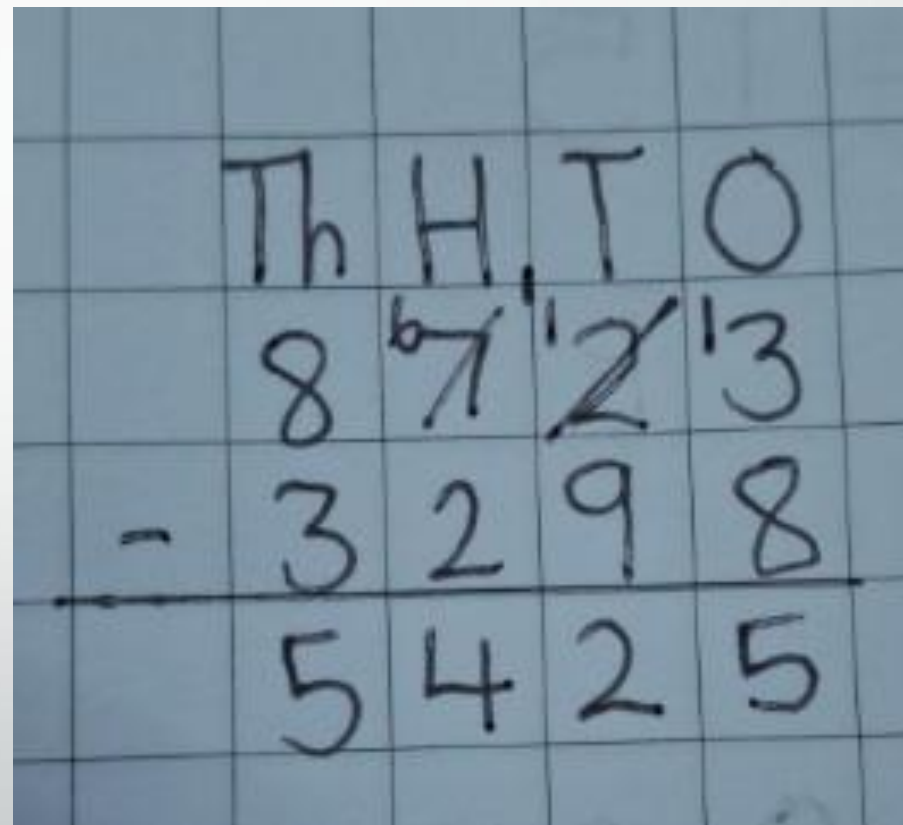
How can I help at home?

Remind children to subtract the ones first.

Think about number bonds to help them to subtract

*For example: 12-2 and then subtract 4 more*

Don't forget to exchange the tens, hundreds and thousands when subtracting.



# Multiplication Year 3

What does it look like in school?

Grid method

How can I help at home?

- Partition the number being multiplied
- Look for related facts that you know ( $6 \times 8 = 48$  and then times it by 10)
- Add the two answers together

A handwritten calculation on graph paper showing the grid method for  $8 \times 64$ . The number 64 is partitioned into 60 and 4. The number 8 is written to the left of a grid. The grid is divided into two columns. The first column contains 480, and the second column contains 32. Below the grid, the final sum is written:  $480 + 32 = 512$ .

	60	4
8	480	32
	$480 + 32 = 512$	

# Multiplication Year 4

What does it look like in school?

Grid method

How can I help at home?

- Partition the number being multiplied
- Look for related facts that you know ( $6 \times 7 = 42$  and then times it by 10)
- Add the three answers together

The image shows a handwritten calculation on blue grid paper. On the left, a grid is drawn with three columns. The top row contains the numbers 200, 70, and 8. The bottom row contains the products 61200, 420, and 48. On the right, a vertical addition is shown: 1200, 420, and 48 are stacked, with a plus sign to the left. A horizontal line is drawn under the 48, and the sum 1668 is written below it.

200	70	8
61200	420	48

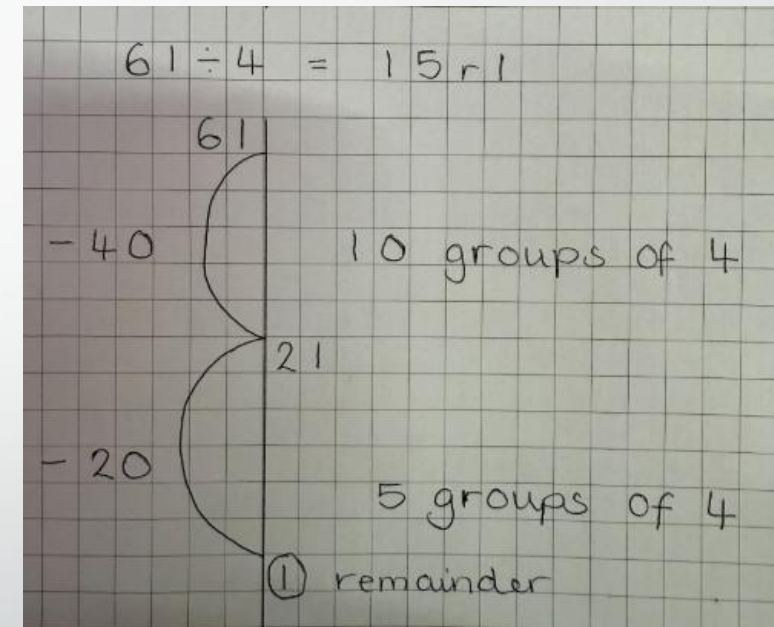
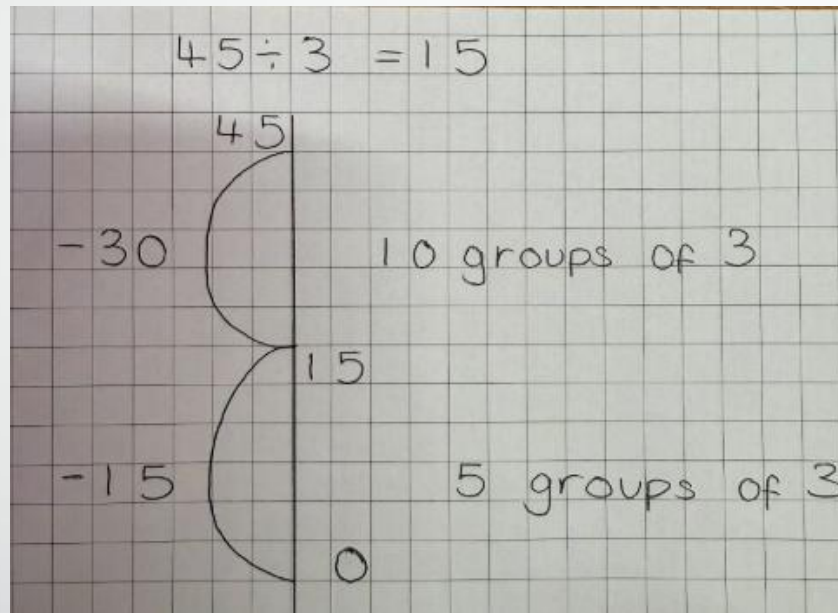
  

	1200
	420
+	48
	1668

# Division Year 3

What does it look like in school?

Division on a vertical number line



How can I help at home?

Start by taking ten groups away

Think about how many groups of that number are left to subtract

Is there a remainder?

# Division Year 4

What does it look like in school?

Chunking method

The image shows handwritten work on grid paper. On the left, two long division problems are shown using the chunking method. The first problem is  $208 \div 8$ . The quotient is written as 26. The steps are:  $8 \times 20 = 160$ , subtracted from 208 to get 48; then  $8 \times 6 = 48$ , subtracted from 48 to get 0. The second problem is  $118 \div 8$ . The quotient is written as 14 with a remainder of 6. The steps are:  $8 \times 10 = 80$ , subtracted from 118 to get 38; then  $8 \times 4 = 32$ , subtracted from 38 to get 6. On the right, a multiplication fact box is drawn, containing the following equations:  $1 \times 8 = 8$ ,  $2 \times 8 = 16$ ,  $5 \times 8 = 40$ ,  $10 \times 8 = 80$ , and  $20 \times 8 = 160$ .

How can I help at home?

Write your fact box

Take away the greatest chunk e.g.  $20 \times 8$

Subtract the chunk

Take away the next greatest chunk e.g.  $6 \times 8$

Write the answer

Is there a remainder?

# Times Tables Year 3

Rapid recall of  
2,5 and 10 (previously learning) times tables  
3,4 and 8 times tables

How can I help at home?

TTRS - <https://play.ttrockstars.com/>



# Times Tables Year 4

Rapid recall of  
2,5 and 10 (previously learning) times tables  
3,4 and 8 times tables  
6,7,9,11 and 12 times tables  
**Ready for the Multiplication tables check**

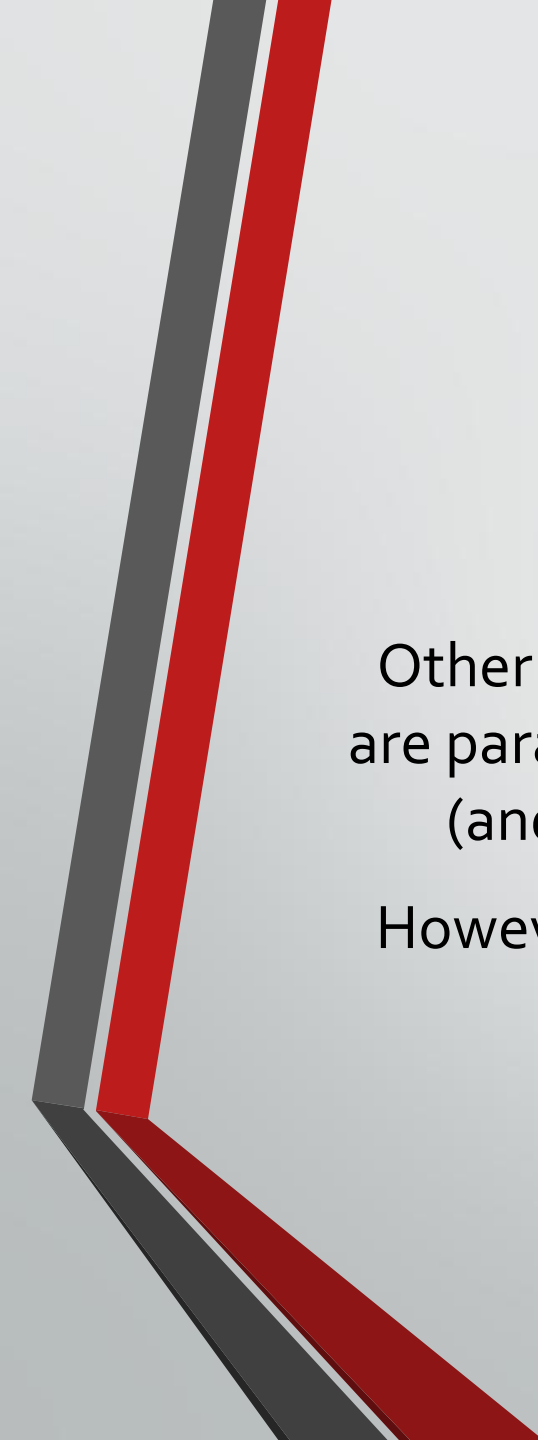
How can I help at home?

TTRS - <https://play.ttrockstars.com/>

MTC -

<https://www.gov.uk/government/collections/multiplication-tables-check>





## Why have we not included other areas of mathematics?

Other areas of maths are important but place value and the four operations are paramount for our children's future. Shape, angles, fractions and measure (and others) all have a place in our curriculum but these rarely change.

However, the processes for  $+$   $-$   $\times$  and  $\div$  do and is the reason we want to offer this guidance.

Still unsure? Get in touch with your child's teacher.