

Sometimes parents tell teachers that they are not confident when helping children with their maths. Parents might be heard to say things like "I don't want to teach them wrong". Perhaps this sounds surprising, but the calculation strategies that we teach at Willow Brook are probably not too dissimilar to the ones that were used *in the olden days!*

With **addition and subtraction** our youngest children write out their calculations in a straight line, placing a digit in each box where possible.

1	2	+	4	=	1	8	4	+	4	+	7	=	1	5
3	6	-	1	3	=	2	3	3	8	=	4	0	-	2

When the numbers are larger we encourage the children to calculate using column addition and column subtraction **addition and subtraction** our youngest children write out their calculations in a straight line, placing a digit in each box where possible.

8	7	4		7	8	9	
5	2	3	-	6	4	2	+
3	5	1		1	4	3	1
				1	1	1	

  

8	7	12		£	5	8	12	3	15
4	5	7	-	£	1	7	2	8	-
4	7	5		£	4	5	1	7	

## Calculation at Willow Brook



When working on **multiplication or division** that can be calculated mentally, children are asked to write down their calculations in a straight line, placing a digit in each box where possible.

3	x	4	=	1	2	1	2	÷	4	=	3		
3	0	x	4	=	1	2	0	8	=	1	6	÷	2

When the multiplication or division cannot be calculated mentally, children should calculate using the formal methods. For multiplication this is called **short multiplication**, and for division this is called **short division**, sometimes referred to as the 'bus stop method'.

2	4		3	4	2	
	6	x		7	x	
1	4	4	2	3	9	4
1	2		2	2	1	

  

7	9	2	8	0	8	6	r2
				5	4	3	32

Our oldest children in school may need to multiply and divide much larger numbers. When doing this they use methods known as **long multiplication** and **long division**.

2	4		1	2	4			
1	6	x		2	6	x		
1	4	4	7	4	4			
2	4	0	+	2	4	8	0	+
3	8	4	3	2	2	4		
			1	1				

  

15	2	6	7	0	1	5	
	1	5	↓		3	0	
	1	1	7		4	5	
	1	0	5	↓	6	0	
	1	2	0		7	5	
					9	0	
					1	0	5
					1	2	0

When children work with fractions, they may be asked to add, subtract or even multiply and divide using fractions. Our

1	+	1	=	2
7		7		7

youngest children will present their fractions using a single digit in each box, but older children may, as their neatness allows, fit a fraction into a single box of their maths book.

3	1/2	+	4	3/4	=	8	1/4
---	-----	---	---	-----	---	---	-----