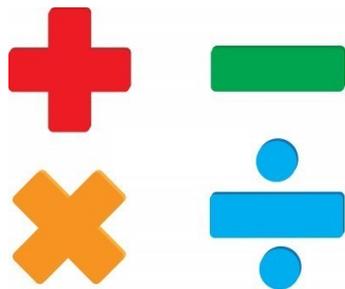


Year Four

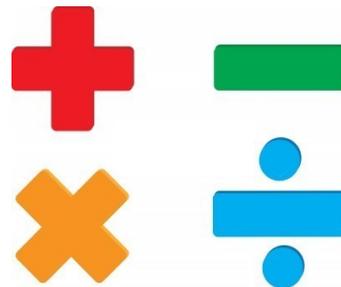
Ways in which you can help your child at home:

- Addition
- Subtraction
- Multiplication
- Division
- Problem solving



We hope that this leaflet has been helpful.

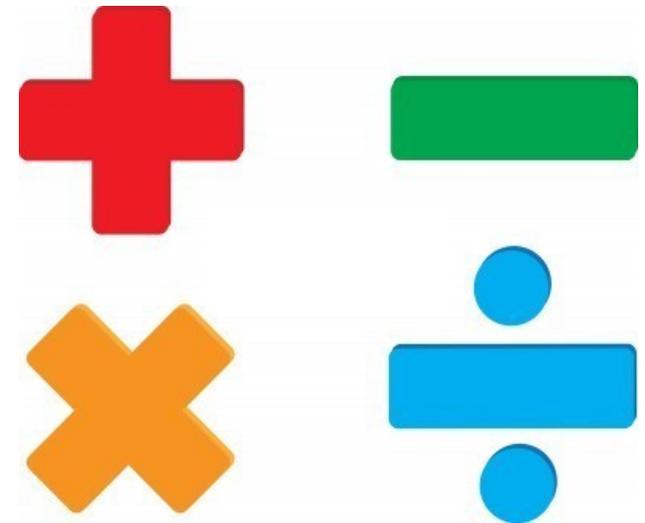
Please do not hesitate to contact the class teacher if you would like further assistance in supporting your child's learning.



Maths Guidance for Parents



Year Four



Bushey Heath Primary School

Addition and subtraction:

Mental calculations: Children need to understand what each of the digits represents so that they can partition numbers to assist in mental calculations.

$$\begin{array}{r}
 \text{t u} \quad \quad \text{t u} \\
 36 + 52 \\
 \hline
 30 + 50 = 80 \\
 80 + 8 = 88
 \end{array}$$

Column methods: When using standard vertical addition and subtraction numbers need to be accurately placed in columns. We then calculate from right to left (units, then tens, then hundreds etc) **carrying** or **borrowing** amounts from the next column when necessary.

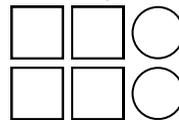
$$\begin{array}{r}
 \text{Th h t u} \quad \quad \text{Th h t u} \\
 4673 + 2518 \\
 \hline
 7191 \\
 \text{1} \quad \quad \text{1}
 \end{array}
 \quad
 \begin{array}{r}
 2453 - 1244 \\
 \hline
 1209 \\
 \text{4} \quad \text{1}
 \end{array}$$

Sometimes an amount may need to be borrowed from a column further across in subtraction, this has be borrowed from each column in turn.

Problem Solving: Children are given the opportunity to use number skills taught to explore and solve mathematical problems from five categories.

Finding all possibilities—Some tripods and bipods flew past Mars. There are at least 2 of each. Tripods have 3 legs, bipods have 2 legs. If there are 23 legs altogether how many tripods were there and how many bipods?

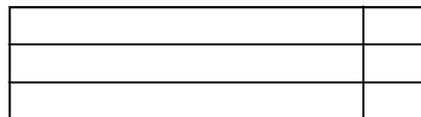
Logic—What colour is each shape? Red is not next to grey, blue is not between white and grey, green is not a square and blue is on the right of pink.



Finding rules and describing patterns - 1 block is needed to make a staircase with 1 step up-and-down. 4 blocks are needed to make a 2 steps up-and-down. How many blocks would be needed for a 5 steps up-and-down?



Diagrammatic puzzles— How many rectangles can you count?



Word problems—There a six apples in a bag and 26 bags. How many apples in total?

Multiplication and division:

Children are expected to know all the times table facts up to 10 x 10.

times table

	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

They also need to be able to use known facts to help them calculate further facts, for example:

$$2 \times 15 = 30 \quad \text{so} \quad 20 \times 15 = 300$$

Column methods: Children are shown how to layout and use standard column method of multiplication and 'bus stop' method of division as they did in year 3.

$$\begin{array}{r}
 24r2 \\
 3 \overline{) 74} \\
 \underline{6} \\
 10
 \end{array}$$

These do, however, still rely on them knowing the tables facts to 10 x 10 to be able to confidently approach these calculations.

I hope this begins to highlight just how integral times tables facts are to the wider range of mathematical skills and knowledge the children need to feel confident and begin to tackle other mathematical problems and challenges.