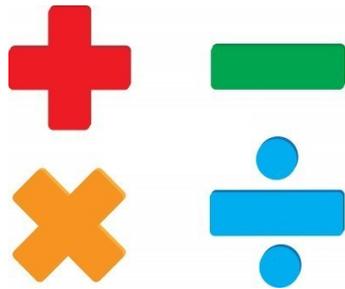


Years Five and Six

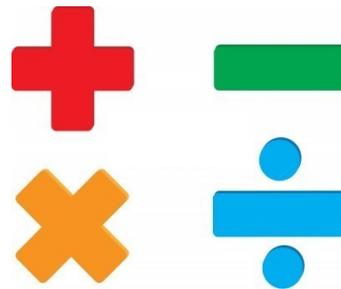
Ways in which you can help your child at home:

- Addition
- Subtraction
- Multiplication
- Division
- Problem solving



We hope that this leaflet has been helpful.

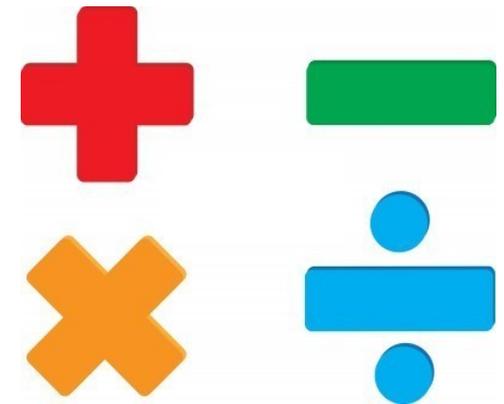
Please do not hesitate to contact the class teacher if you would like further assistance in supporting your child's learning.



Maths Guidance for Parents



Years Five and Six



**Bushey Heath
Primary School**

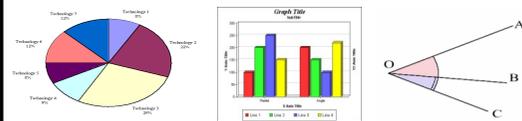
Addition and subtraction:

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

$$\begin{array}{r}
 \text{t} \quad \text{u} \qquad \text{t} \quad \text{u} \\
 3 \quad 6 \quad + \quad 5 \quad 2 \\
 \swarrow \quad \searrow \quad \quad \swarrow \quad \searrow \\
 30 + 50 = 80 \qquad 6 + 2 = 8 \qquad 80 + 8 = 88
 \end{array}$$

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 as in year 4. **They now need to be able to make these calculations when the numbers have decimals, for example $549.32 + 230.73$**

Applying the skills: The children need to apply these calculation skills to other mathematical work: calculating data from graphs and tables, calculating the difference between angles, finding missing numbers in a sum etc.

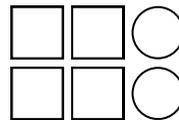


To do this they have to have a thorough grasp of place value and what each digit represents and be able to manipulate numbers confidently.

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?

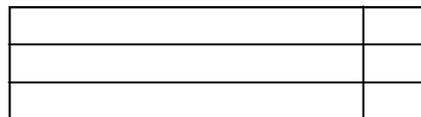
Logic—What colour is each shape? Red is not next to grey, blue is not between white and grey, green is not a square and blue is on the right of pink.



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 10×10 and be able to use this to extrapolate further information, for example: $2 \times 15 = 30$ so $0.2 \times 15 = 3$ and $0.2 \times 1.5 = 0.3$

Column methods: Children are shown how to layout and use standard column method of multiplication and the 'bus stop' method of division rather than the traditional method of long division.

$$\begin{array}{r}
 2 \quad 3 \quad r \quad 2 \\
 3 \overline{) 7 \quad 4} \\
 \underline{6 \quad 0} \\
 1
 \end{array}$$

These methods rely on the quick and confident recall of the times table facts. This again highlights the need for children to know these facts securely to allow them to tackle a wider range of mathematical problems and challenges unhindered.

Multiplication Vocabulary: multiply, groups of, lots of, multiples, product, square numbers or numbers squares and cubed.

Division Vocabulary: divide, shared, factors.

Prime numbers will also feature in this.