

## Year 5

Methods and Representations

At Westbury Park School, we follow the White Rose scheme of learning. This scheme allows us to ensure total coverage of the curriculum, appropriate knowledge and skills progression and offers a range of methods and representations to support arithmetic and problem solving.

This booklet offers you an example of how they are taught and used within your child's year group.

For videos showing the maths in action, please click on the links throughout the booklet.

## Addition

Children are encouraged to use bar models, part whole models and number sentences to represent their understanding of the calculation.

The formal written method of column addition is used to solve the calculation.
Adding numbers with more than 4 digits Click here for the video

$104,328+61,731=166,059$

| 1 | 0 | 4 | 3 | 2 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| + | 6 | 1 | 7 | 3 | 1 |
| 1 | 6 | 6 | 0 | 5 | 9 |
| 1 |  |  |  |  |  |

Addition of up to 3dp
Click here for the video


## Subtraction

Children are encouraged to use bar models, part whole models and number sentences to represent their understanding of the calculation.

The formal written method of column subtraction is used to solve the calculation.

Subtract numbers with more than 4 digits
Click here for the video

$294,382-182,501=111,881$
Subtract numbers with up to 3dp
Click here for the video


## Multiplication

Children are encouraged to mentally solve some multiplication calculations including multiplying by 10,100 and 1000 and using their number facts up to $12 \times 12$.

The formal written methods of short and long multiplication are used to solve the calculation.

Multiply 4 digit numbers by 1 digit numbers (short multiplication)
Click here for the video

## $1,826 \times 3=5,478$

|  | Th | H | T | O |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | 8 | 2 | 6 |
| $\times$ |  |  |  | 3 |
|  | 5 | 4 | 7 | 8 |
| 2 | 1 |  |  |  |

Multiply 2 and 3 digit numbers by 2 digit numbers
Click here for the video
$22 \times 31=682$

|  | H | T | O |
| :---: | :---: | :---: | :---: |
|  |  | 2 | 2 |
| $\times$ |  | 3 | 1 |
|  |  | 2 | 2 |
|  | 6 | 6 | 0 |
|  | 6 | 8 | 2 |

## Division

Children are encouraged to use their times table facts to aid them in their division. The relationship between division and multiplication is referred back to throughout teaching.

The formal written method of short division (also known as bus stop) is used to calculate.

Divide 3 and 4 digits by 1 digit
Click here for video

## $856 \div 4=214$


$8,532 \div 2=4,266$

|  | 4 | 2 | 6 | 6 |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 8 | 5 | $1_{3}$ | $1_{2}$ |

