



**Westbury Park  
School**

**Year 3**

**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.**

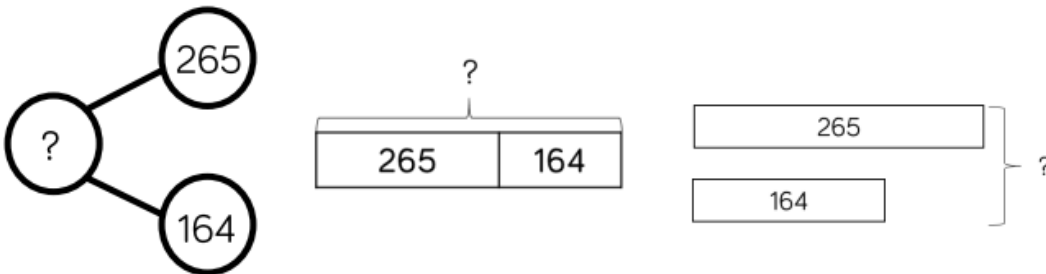
# Addition

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

Children use the expanded method of addition with dienes. They will often do this practically in the classroom- a visual representation of this can be seen below. The formal written method of column addition is then used to solve the calculation.

Adding numbers with up to 3 digits

[Click here for the video](#)



$$265 + 164 = 429$$

Hundreds	Tens	Ones

265
+ 164
-----
429
-----
1

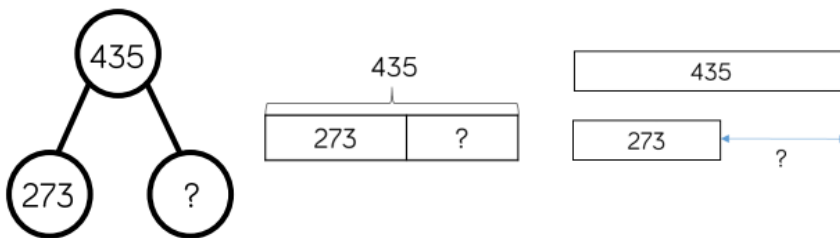
# Subtraction

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

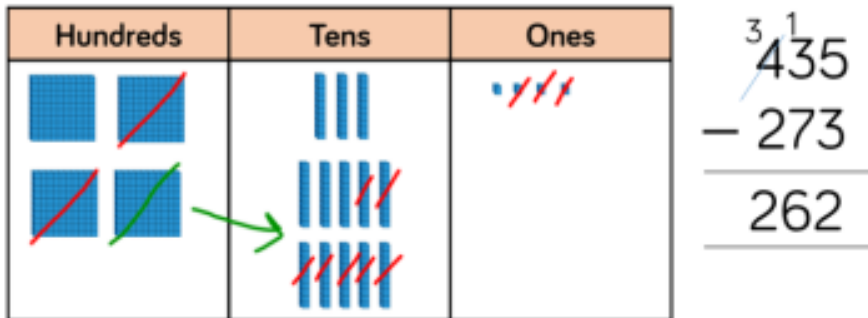
Children use the expanded method of subtraction with dienes. They will often do this practically in the classroom- a visual representation of this can be seen below. The formal written method of column subtraction is then used to solve the calculation.

Subtract numbers with up to 3 digits

[Click here for the video](#)



$$435 - 273 = 262$$



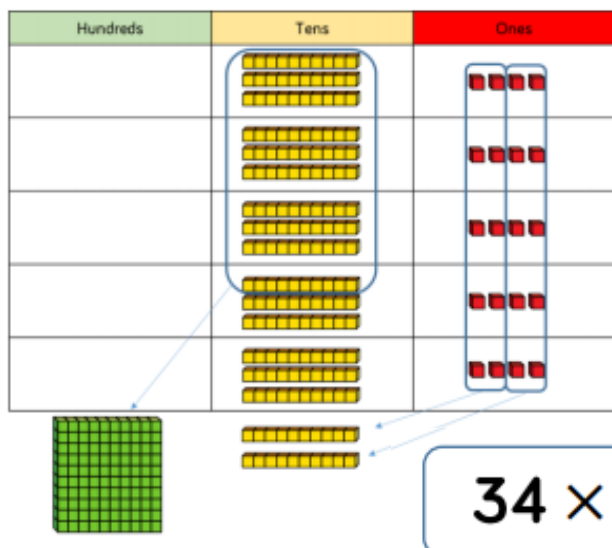
# Multiplication

Children are encouraged to mentally solve some multiplication calculations including counting in 50's and 100's and fluently knowing their 3, 4 and 8 times tables.

Children are encouraged to show multiplication using dienes. They use the dienes to form a repeated addition using the language '5 lots of 34' (see example below) The formal written methods of short multiplication are used to solve the calculation for children when ready.

Multiply 2 digit numbers by 1 digit

[Click here for the video](#)



	H	T	O	
		3	4	
×			5	
	1	7	0	

1 2

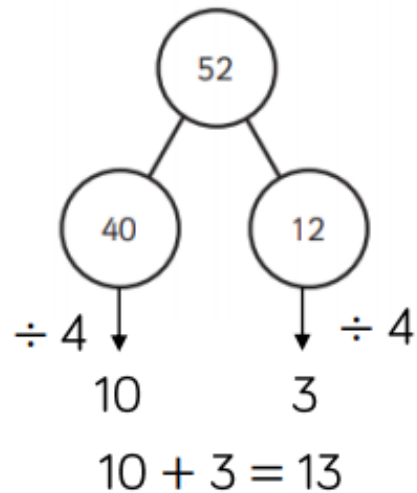
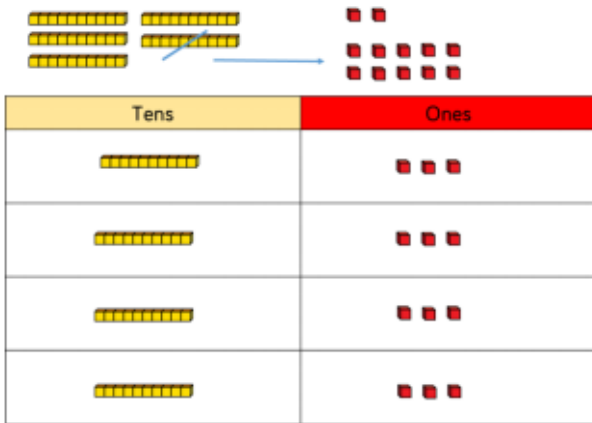
# Division

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.

In Year 3, children are encouraged to use knowledge of times tables to solve division in the first instance. By partitioning numbers (see part-whole representation) children can use known facts and methods to solve calculations before moving onto the formal short division method.

## Divide 2 digits by 1 digit

$$52 \div 4 = 13$$



## Divide 2 digits by 1 digit (using short division)

		1	3	
	4	5	12	

$$52 \div 4 = 13$$