



Maths Knowledge Organiser for Year 3 & 4

Term: Autumn 1

Key vocabulary:

- place value
- more than
- less than
- numerals
- digits
- columns
- compare
- greater than
- less than
- larger
- smaller
- represent
- addition
- add
- plus
- subtraction
- subtract
- takeaway
- minus
- thousands, hundreds, tens, ones
- carrying numbers
- decomposition
- inverse operations
- estimate

Curriculum Objectives

Year 3

Number – Place Value

Count from 0 in multiples of 4, 8, 50 and 100
 Find 10 or 100 more or less than a given number
 Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
 Compare and order numbers up to 1000
 Identify, represent and estimate numbers using different representations
 Read and write numbers up to 1000 in numerals and in words
 Solve number problems and practical problems involving these ideas

Number – Addition and Subtraction

Add and subtract numbers mentally, including: a three-digit number and ones; a three-digit number and tens; a three digit number and hundreds.
 Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.
 Estimate the answer to a calculation and use inverse operations to check answers.
 Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

Year 4

Number – Place Value

Count in multiples of 6, 7, 9, 25 and 1000.
 Find 1000 more or less than a given number.
 Count backwards through zero to include negative numbers.
 Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).
 Order and compare numbers beyond 1000.
 Identify, represent and estimate numbers using different representations.
 Round any number to the nearest 10, 100 or 1000.
 Solve number and practical problems that involve all of the above and with increasingly large positive numbers
 Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.

Number – Addition and Subtraction

Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.
 Estimate and use inverse operations to check answers to a calculation.
 Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why.

Examples

Ten Thousands (T Th)	Thousands (Th)	Hundreds (H)	Tens (T)	Ones (O)
1	3	5	4	8

Place value of 1 = 10 000
 Place value of 3 = 3 000
 Place value of 5 = 500
 Place value of 4 = 40
 Place value of 8 = 8

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Hundreds	Tens	Units/Ones	Tenths	Hundredths	Thousandths	Ten-thousandths
6	1	0				
6	1					
0	6	1				
0	0	6	1			

Have you spotted a pattern?

Diagram showing multiplication by 10 and 100 with arrows indicating the shift of digits.

For more information, please see the Calculation Policy on the website.