

Maths Knowledge Progression

This document sets out the expectation for Maths learning in each term for each year group. It is divided into sections within different parts of the maths curriculum.

Garden Class

EYFS			Year 1			Year 2			
			Number: Number and Place Value						
	Autumn	Spring	Summer	Autumn	Spring	Summer	Autumn	Spring	Summer
Counting	To find 1,2 and 3	To introduce 0	To build numbers beyond 10 (10-20)	count to and across 10, forwards and backwards, beginning with 0 or 1, or from any given number	count to and across 50, forwards and backwards, beginning with 0 or 1, or from any given number	count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number	count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward		
	To find 4 and 5	To find 0-5	To verbally count beyond 20	count, read and write numbers to 100 in numerals; count in multiples of 2s	count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s	count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s			
	To find one more	To find 6, 7 and 8		given a number, identify 1 more and 1 less	given a number, identify 1 more and 1 less	given a number, identify 1 more and 1 less			
	To find one less	To find 9 and 10							
Comparing Number	The composition of numbers 1, 2 and 3	Conceptual subitising to 5	To look at the composition of numbers 0-8	use the language of: equal to, more than, less than (fewer), most, least	use the language of: equal to, more than, less than (fewer), most, least	use the language of: equal to, more than, less than (fewer), most, least	compare and order numbers from 0 up to 100; use <, > and = signs		
	The composition of 4 and 5	Conceptual subitising to 8	To Subitise to 5						
		Compare number to 10							
	To create sorting rules								
	To compare amounts								
Identifying, representing and estimating numbers	To subitise 1, 2 and 3	To subitise 0 – 5		identify and represent numbers using objects and pictorial representations including the number line,	identify and represent numbers using objects and pictorial representations including the number line,	identify and represent numbers using objects and pictorial representations including the number line,	identify, represent and estimate numbers using different representations, including the number line		

Maths Knowledge Progression

	To represent 1, 2 and 3	To represent 0 - 5							
	To subtract 4 and 5	Composition of numbers up to 5							
	To represent 4 and 5	To represent 6,7 and 8							
		Composition of 6,7 and 8							
		To represent numbers 9 and 10							
		To subtract to 10.							
		Composition to 10							
		To make arrangements of 10.							
Reading and writing numbers (including Roman numeral)					read and write numbers from 1 to 20 in numerals and words	read and write numbers from 1 to 20 in numerals and words	read and write numbers to at least 100 in numerals and in words		
Understanding Place Value							recognise the place value of each digit in a two-digit number (10s, 1s)		
Rounding									
Problem Solving							use place value and number facts to solve problems		

Maths Knowledge Progression

Lower KS2

		Year 3			Year 4		
		Number: Number and Place Value					
		Autumn	Spring	Summer	Autumn	Spring	Summer
Counting	find 10 or 100 more or less than a given number		count from 0 in multiples of 4, 8, 50 and 100;		count in multiples of 6, 7, 9,	count in multiples of 10, 25, 50,100 and 1000	count backwards through zero to include negative numbers
					find 10, 100 and 1000 more or less than a given number		
Comparing Number				compare and order numbers up to 1000	order and compare numbers beyond 1000		
Identifying, representing and estimating numbers	identify, represent and estimate numbers using different representations in the 1000s,				identify, represent and estimate numbers using different representations beyond 1000.		
Reading and writing numbers (including Roman numeral)	read and write numbers up to 1000 in numerals and in words						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.

Maths Knowledge Progression

Understanding Place Value	recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)		
Rounding					round any number to the nearest 10, 100 or 1000	round any number to the nearest 10, 100 or 1000
Problem Solving			solve number problems and practical problems involving these ideas.	solve number and practical problems that involve all of the above and with increasingly large positive numbers	solve number and practical problems that involve all of the above and with increasingly large positive numbers	solve number and practical problems that involve all of the above and with increasingly large positive numbers

Maths Knowledge Progression

Upper KS2

		Year 5			Year 6		
		Number: Number and Place Value					
		Autumn	Spring	Summer	Autumn	Spring	Summer
Counting	count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000					use negative numbers in context, and calculate intervals across 0	use negative numbers in context, and calculate intervals across 0
	interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through 0						
Comparing Number	read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit				read, write, order and compare numbers up to 10,000,000 and determine the value of each digit		
Identifying, representing and estimating numbers writing				read Roman numerals to 1,000 (M) and recognise years written in Roman numerals	read, write, order and compare numbers up to 10,000,000 and determine the value of each digit		
Reading and writing numbers (including Roman	read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit			read Roman numerals to 1,000 (M) and recognise years written in Roman numerals	read, write, order and compare numbers up to 10,000,000 and determine the value of each digit		

Maths Knowledge Progression

Understanding Place Value	read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit			read, write, order and compare numbers up to 10,000,000 and determine the value of each digit		
Rounding		round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000			round any whole number to a required degree of accuracy	
Problem Solving	solve number problems and practical problems that involve all of the above	solve number problems and practical problems that involve all of the above	solve number problems and practical problems that involve all of the above	solve number and practical problems that involve all of the above	solve number and practical problems that involve all of the above	solve number and practical problems that involve all of the above