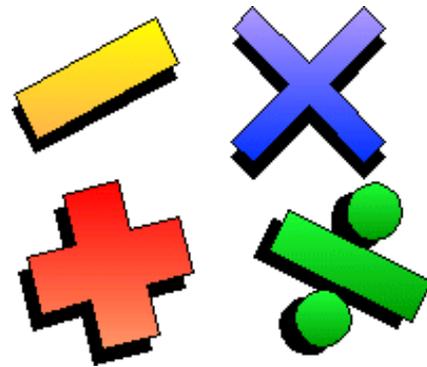


Mathematics at Westlea

Key Targets for each year group



YEAR 1 (age 5-6 years old)

Number System	Mental Maths	Calculations
<p>Read and write numbers to 100 in numerals</p> <p>Given a number, identify one more and one less</p> <p>Represent numbers using objects and pictures including the number line</p> <p>Use the language of: equal to, more than, less than (fewer), most, least</p> <p>Read and write numbers 1 to 20 in words</p> <p>Recognise a half as one of two equal parts of an object, shape or quantity</p> <p>Recognise a quarter as one of four equal parts of an object, shape or quantity</p>	<p>Count to and across 100, forwards and backwards, from any given number</p> <p>Count in multiples of twos, fives and tens</p> <p>Instant recall of number pairs to 10</p> <p>Recall addition and subtraction facts to 10 fluently</p> <p>Know the doubles of numbers to $10 + 10$</p> <p>Recognise and know the value of different denominations of coins and notes</p> <p>Know the days of the week and the months of the year</p> <p>Tell the time to the hour and half past the hour</p>	<p>Represent and use addition and subtraction facts within 20</p> <p>Add and subtract one-digit and two-digit numbers to 20, including zero</p> <p>Solve addition and subtraction problems, using concrete objects and pictorial representations</p> <p>Solve missing number problems such as $7 = \square - 9$</p> <p>Share objects into equal groups and count how many in each group.</p>

YEAR 2 (age 6-7 years old)

Number System	Mental Maths	Calculations
<p>Read and write numbers to at least 100 in numerals and in words</p> <p>Count in steps of 2, 3 and 5 from 0</p> <p>Recognise the value of each digit in a two-digit number (tens, ones)</p> <p>Compare and order numbers from 0 up to 100; use <, > and = signs</p> <p>Recognise common fractions $\frac{1}{4}$ $\frac{1}{3}$ $\frac{2}{4}$ $\frac{3}{4}$ of a length, shape, set of objects or quantity</p>	<p>Instant recall of 2x, 5x & 10x tables</p> <p>Recall division facts for 2x, 5x & 10x tables</p> <p>Recognise odd and even numbers</p> <p>Recall addition and subtraction facts to 20 fluently</p> <p>Count in tens from any number, forward or backward</p> <p>Add & subtract numbers mentally, including:</p> <ul style="list-style-type: none"> ▪ A two-digit n° & ones (eg 56 + 3) ▪ A two-digit n° & tens (eg 82 - 20) <p>Add three single digit numbers together</p> <p>Recall doubles for numbers to 20 and recognise their corresponding halves</p> <p>Tell the time to five minutes, including quarter past/to the hour</p>	<p>Add together two 2-digit numbers</p> <p>Find the difference between two 2-digit numbers</p> <p>Solve missing number problems</p> <p>Use arrays and pictorial representations to solve multiplication problems</p> <p>Use sharing to answer division questions</p> <p>Continue a number sequence increasing or decreasing in regular steps</p> <p>Find different combinations of coins that equal the same amounts of money</p> <p>Solve problems involving the addition and subtraction of money, including giving change</p>

YEAR 3 (age 7-8 years old)

Number System	Mental Maths	Calculations
<p>Read and write numbers up to 1000 in numerals and in words</p> <p>Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)</p> <p>Compare and order numbers up to 1000</p> <p>Count from 0 in multiples of 4, 8, 50 & 100</p> <p>Find 10 or 100 more or less than a given n°</p> <p>Round any 2 or 3-digit number to the nearest 10 or 100</p> <p>Count up & down in tenths</p> <p>Recognise fractions with small denominators</p>	<p>Instant recall of 3x, 4x & 8x tables</p> <p>Recall division facts for 3x, 4x & 8x tables</p> <p>Add & subtract numbers mentally, including:</p> <ul style="list-style-type: none"> ▪ A three-digit n° & ones (eg $357 + 6$) ▪ A three-digit n° & tens (eg $492 - 30$) ▪ A three-digit n° & hundreds (eg $627 + 200$) <p>Double multiples of 5 up to 100 (eg $45 + 45$)</p> <p>Recall number pairs that total 100 (eg $37 + 63 = 100$)</p> <p>Know the number of seconds in a minute and the number of days in each month/year</p> <p>Tell the time from an analogue clock, including using Roman numerals</p>	<p>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</p> <p>Use formal written methods of multiplication for two-digit numbers times one-digit numbers</p> <p>Use inverse operations to solve missing number problems</p> <p>Add and subtract fractions with the same denominator within one whole (eg $5/7 + 1/7 = 6/7$)</p> <p>Add and subtract amounts of money giving change up to £10.00</p>

YEAR 4 (age 8-9 years old)

Number System	Mental Maths	Calculations
Read and write numbers up to 10,000 in numerals and in words	Recall multiplication and division facts for multiplication tables up to 12 x 12	Add and subtract numbers with up to 4 digits using the formal methods of columnar addition and subtraction
Find 1000 more or less than a given n°	Recognise and use factor pairs	Multiply two-digit and three-digit numbers by a one-digit number using formal written layout
Round any number to the nearest 10, 100 or 1000	Multiply or divide a one or two-digit number by 10 and 100	Calculate division facts with remainders
Count backwards through zero to include negative numbers	Add/subtract two 2-digit numbers mentally (eg $39 + 19 = 58$, $91 - 35 = 56$)	Find fractions of quantities (eg $\frac{3}{5}$ of 35)
Read Roman numerals to 100 (I to C)	Double all the numbers up to 100	Add and subtract fractions with the same denominator
Count up and down in hundredths	Recognise decimal equivalents to $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$	Find a quarter of a number by halving and halving again
Recognise families of common equivalent fractions	Read, write and convert time between analogue and digital 12 & 24-hour clocks	Solve simple measures and money problems involving fractions and decimals to two decimal places
Round decimals with one decimal place to the nearest whole number		Convert between different units of measure (eg kilometre to metre; hour to min)

YEAR 5 (age 9-10 years old)

Number System	Mental Maths	Calculations
<p>Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit</p> <p>Count forwards or backwards in steps of powers of 10 for any given number</p> <p>Count forwards and backwards with positive and negative whole numbers through zero</p> <p>Round any number up to a million to the nearest 10, 100, 1000, 10 000 and 100 000</p> <p>Read Roman numerals to 1000 (M) and recognise years written in Roman numerals</p> <p>Compare and order fractions</p> <p>Recognise mixed numbers and improper fractions</p> <p>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents</p> <p>Round decimals (with 2dp) to the nearest whole number and to one decimal place</p> <p>Write percentages as a fraction (32/100), and as a decimal</p>	<p>Multiply and divide numbers mentally drawing upon known facts (eg 40×7, 0.3×6, 80×60, $320 \div 8$)</p> <p>Instant recall of all square numbers up to 12×12</p> <p>Add and subtract numbers mentally with increasingly large numbers</p> <p>Recognise multiples of 10 that pair together to make 1000</p> <p>Multiply and divide whole numbers and decimals by 10, 100 and 1000</p> <p>Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.</p> <p>Recall prime numbers up to 19</p> <p>Identify equivalent fractions</p>	<p>Add and subtract whole numbers with more than 4 digits using formal written methods</p> <p>Multiply whole numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication</p> <p>Divide numbers up to 4 digits by a one-digit number using the formal written method of short division</p> <p>Double and halve whole numbers</p> <p>Convert mixed numbers to improper fractions and vice versa</p> <p>Add and subtract fractions with denominators that are multiples of the same number</p> <p>Multiply proper fractions and mixed numbers by whole numbers</p> <p>Find fractions and simple percentages of quantities</p>

YEAR 6 (age 10-11 years old)

Number System	Mental Maths	Calculations
<p>Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit</p> <p>Identify the value of each digit in numbers given to three decimal places</p> <p>Round any whole number or decimal to a required degree of accuracy</p> <p>Use negative numbers in context, and calculate intervals across zero</p> <p>Compare and order fractions including fractions >1</p>	<p>Solve decimal calculations using related multiplication/division facts (eg $4.8 \div 6$)</p> <p>Perform mental calculations, including with mixed operations and large numbers</p> <p>Recognise decimal pairs to 1 and 100</p> <p>Double and halve decimal numbers</p> <p>Identify common factors, common multiples and prime numbers</p> <p>Recognise squared/cubed numbers, square roots and powers.</p> <p>Use common factors to simplify a fraction to its lowest form</p> <p>Identify equivalent fractions, decimals and percentages</p> <p>Convert between standard units of length, mass and capacity including miles and kilometres</p>	<p>Use formal written methods of addition and subtraction for whole numbers & decimals</p> <p>Multiply a 4-digit number by a 2-digit whole number using the efficient written method of long multiplication</p> <p>Divide a 4-digit number by a 2-digit whole number using the formal written method of long division</p> <p>When dividing, interpret remainders in different contexts: as whole numbers, fractions, decimals or by rounding</p> <p>Use BODMAS to carry out calculations involving all operations</p> <p>Add and subtract fractions and mixed numbers by finding common denominators</p> <p>Multiply two fractions together</p> <p>Divide fractions by whole numbers (eg $1/3 \div 2 = 1/6$)</p> <p>Use simple algebraic formulae</p> <p>Calculate percentages (eg 36% of 250)</p>