Y4 Maths Curriculum - Parent Guide

The aim of this document is to give an at-a-glance guide to how maths is taught at Chelmondiston and how it progresses through topics. In each of the major topic areas (Number, Measurement, Geometry and Statistics), the curriculum has been broken down into key areas. For each of these areas, you can see which National Curriculum objectives are covered in Year 4 and when this objective is first introduced as well as any prior learning.

Place Value		Prior Learning
Count in multiples of 6, 7, 9, 25 and 1000	Autumn 1	• Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number • Identify, represent and estimate numbers using different representations • Read and write numbers up to 1000 in numerals and in words • Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) • Compare and order numbers up to 1000 • Solve number problems and practical problems involving these ideas
Count backwards through zero to include negative numbers	Autumn 1	
Identify, represent and estimate numbers using different representations	Autumn 1	
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	Autumn 1	
Find 1000 more or less than a given number	Autumn 1	
Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)	Autumn 1	
Order and compare numbers beyond 1000	Autumn 1	
Round any number to the nearest 10, 100 or 1000	Autumn 1	
Solve number and practical problems that involve all of the above and with increasingly large positive numbers	Autumn 1	
Addition and Subtraction		Prior Learning
Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	Autumn 2	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
Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	Autumn 2	

		Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction
Multiplication and Division		**Prior Learning**
Recall multiplication and division facts for multiplication tables up to 12 × 12	Spring 1	• Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers	Spring 1	• Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods
Recognise and use factor pairs and commutativity in mental calculations	Spring 1	
Multiply two digit and three digit numbers by a one digit number using formal written layout	Spring 1	
Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	Spring 1	• Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects
Fractions		**Prior Learning**
Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.	Spring 2	• Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10
Recognise and show, using diagrams, families of common equivalent fractions	Spring 2	• Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
Add and subtract fractions with the same denominator	Spring 2	
Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities,	Spring 2	• Recognise and use fractions as numbers:

including non-unit fractions where the answer is a whole number		unit fractions and non-unit fractions with small denominators • Recognise and show, using diagrams, equivalent fractions with small denominators • Compare and order unit fractions, and fractions with the same denominators • Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7}+\frac{1}{7}=\frac{6}{7}$] • Solve problems that involve all of the above
Decimals		**Prior Learning**
Recognise and write decimal equivalents of any number of tenths or hundredths	Spring 2	
Recognise and write decimal equivalents to $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$.	Spring 2	
Round decimals with one decimal place to the nearest whole number	Summer 1	
Compare numbers with the same number of decimal places up to two decimal places	Summer 1	
Solve simple measure and money problems involving fractions and decimals to two decimal places	Summer 1	
Measurement		**Prior Learning**
Convert between different units of measure [for example, kilometre to metre; hour to minute]	Summer 1	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
Estimate, compare and calculate different measures	Summer 1	
Money		**Prior Learning**
Estimate, compare and calculate different measures, including money in pounds and pence	Summer 2	• Add and subtract amounts of money to give change, using both £ and p in practical contexts

Time		Prior Learning
Read, write and convert time between analogue and digital 12- and 24-hour clocks	Summer 2	• Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks • Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight • Know the number of seconds in a minute and the number of days in each month, year and leap year • Compare durations of events [for example to calculate the time taken by particular events or tasks]
Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	Summer 2	

Perimeter, area and volume		
Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres	Spring 2	• Measure the perimeter of simple 2-D shapes
Find the area of rectilinear shapes by counting squares	Spring 2	

Geometry		Prior Learning
Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	Summer 2	• Draw 2-D shapes • Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
Identify lines of symmetry in 2-D shapes presented in different orientations	Summer 2	

Angles and Lines

Identify acute and obtuse angles and compare and order angles up to two right angles by size	Summer 1	• Recognise angles as a property of shape or a description of a turn • Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle • Identify horizontal and vertical lines and pairs of perpendicular and parallel lines
Identify lines of symmetry in 2-D shapes presented in different orientations	Summer 2	
Complete a simple symmetric figure with respect to a specific line of symmetry	Summer 2	

Position and Direction

Describe positions on a 2-D grid as coordinates in the first quadrant	Summer 2	
Describe movements between positions as translations of a given unit to the left/right and up/down	Summer 2	
Plot specified points and draw sides to complete a given polygon	Summer 2	

Statistics

		Prior Learning
Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	Summer 2	• Interpret and present data using bar charts, pictograms and tables • Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables
Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Summer 2	