Y3 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 3 and when this objective is first introduced as well as any prior learning.

<table>
<tr><th colspan="2">Place Value</th><th>Prior Learning</th></tr>
<tr><td>Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number</td><td>Autumn 1</td><td rowspan="7">Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
Read and write numbers to at least 100 in numerals and in words
Identify, represent and estimate numbers using different representations, including the number line
Recognise the place value of each digit in a two-digit number (tens, ones)
Compare and order numbers from 0 up to 100; use <, > and = signs
Use place value and number facts to solve problems</td></tr>
<tr><td>Identify, represent and estimate numbers using different representations</td><td>Autumn 1</td></tr>
<tr><td>Read and write numbers up to 1000 in numerals and in words</td><td>Autumn 1</td></tr>
<tr><td>Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)</td><td>Autumn 1</td></tr>
<tr><td>Compare and order numbers up to 1000</td><td>Autumn 1</td></tr>
<tr><td>Solve number problems and practical problems involving these ideas</td><td>Autumn 1</td></tr>
<tr><th colspan="2">Addition and Subtraction</th><th>Prior Learning</th></tr>
<tr><td>Add and subtract numbers mentally, including:
a three-digit number and ones
a three-digit number and tens
a three-digit number and hundreds</td><td>Autumn 2</td><td rowspan="2">Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
a two-digit number and ones
a two-digit number and tens
two two-digit numbers
adding three one-digit numbers
Solve problems with addition</td></tr>
<tr><td>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</td><td>Autumn 2</td></tr>
</table>

Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	Autumn 2	and subtraction: • using concrete objects and pictorial representations, including those involving numbers, quantities and measures • applying their increasing knowledge of mental and written methods Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems
Solve problems, including missing number problems	Spring 2	
Multiplication and Division		**Prior Learning**
Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Supported by TTRockstars, Y3 children learn all facts to x12 by the end of the year.	Spring 1	• Recall and use multiplication and division facts for the 2, 3, 4, 5 and 10 multiplication tables, including recognising odd and even numbers • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot • Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems
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	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	Spring 1	
Fractions		**Prior Learning**

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	Spring 2	• Recognise, find, name and write fractions $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity • Recognise the equivalence of $\frac{1}{2}$ and $\frac{2}{4}$ • Write simple fractions for example, $\frac{1}{2}$ of 6 = 3
Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	Spring 2	
Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators	Spring 2	
Recognise and show, using diagrams, equivalent fractions with small denominators	Spring 2	
Compare and order unit fractions, and fractions with the same denominators	Summer 1	
Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7}+\frac{1}{7}=\frac{6}{7}$]	Summer 1	
Solve problems that involve all of the above	Spring 2	
Measurement		Prior Learning
Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Spring 1	• Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels • Compare and order lengths, mass, volume/capacity and record the results using >, < and =
Money		Prior Learning
Add and subtract amounts of money to give change, using both £ and p in practical contexts	Summer 2	• Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value • Find different combinations of coins that equal the same

		amounts of money • Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change
Time		**Prior Learning**
Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks	Summer 1	• Compare and sequence intervals of time • Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times • Know the number of minutes in an hour and the number of hours in a day
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	Summer 1	
Know the number of seconds in a minute and the number of days in each month, year and leap year	Summer 1	
Compare durations of events [for example to calculate the time taken by particular events or tasks]	Summer 1	
Perimeter, area and volume		
Measure the perimeter of simple 2-D shapes	Spring 2	
Geometry		**Prior Learning**
Draw 2-D shapes	Summer 1	• Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line • Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] • Compare and sort common 2-D shapes and everyday objects • Recognise and name common 3-D shapes
Make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	Summer 1	

		[for example, cuboids (including cubes), pyramids and spheres] • Compare and sort common 3-D shapes and everyday objects
Angles and Lines		
Recognise angles as a property of shape or a description of a turn	Summer 2	
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	Summer 2	
Identify horizontal and vertical lines and pairs of perpendicular and parallel lines	Summer 2	
Statistics		**Prior Learning**
Interpret and present data using bar charts, pictograms and tables	Summer 2	• Interpret and construct simple pictograms, tally charts, block diagrams and simple tables • Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity • Ask and answer questions about totalling and comparing categorical data
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	Summer 2	