Maths CURRICULUM MAP 2025-2026

Intent:

Mathematics is essential to everyday life; from science and technology through to the financial literacy required in most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, a sense of enjoyment and curiosity about the subject. By following the national curriculum programme of study, we ensure that our students study a breadth of mathematical concepts based around the key strands of number and place value, four operations, fractions, geometry, measurement and statistics. Each strand is broken down into key topics which are then separated into a sequence of learning objectives which each class moves through at the correct pace for the students.

Our aims within Maths is to ensure that all of our pupils become fluent in the fundamentals of mathematics, including through varied and frequent practice of increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. All of our pupils are given opportunity to reason mathematically, using mathematically language. They solve problems by applying their mathematics in a variety of contexts using different strategies, including breaking down problems into a series of simpler steps and persevering in seeking solutions. We teach Maths using the Maths No Problem scheme (accessed and recognised by the DfE), an approach to teaching maths developed in Singapore. We focus on key aspects of maths such as problem solving, fluency and relational understanding, which are at the heart of the scheme. Using the Concrete Pictorial Abstract (CPA) approach, Maths No Problem allows pupils to spend time to fully explore a topic, reinforcing it with practice, before moving onto the next one. As a whole school, we use the Maths No Problem (MNP) progression framework, where the sequence of lessons is carefully organised with clear lines of progression. SOW allows our teachers to have access to the overview of the National Curriculum topics covered during the school year by term, a full lesson breakdown for each NC topic and the learning objective for each lesson.

By ensuring the fundamentals are embedded during KS1 we create a solid platform on which to build in KS2, with a focus on application of content to complex problems. For those that have not yet mastered the fundamentals there is a continued emphasis on repetition of key concepts. However, for the more able students the SOW is designed so that key concepts are recapped quickly before spending more time exposing students to applied questions to develop depth of understanding and problem-solving techniques. From the SOW, teachers are able to choose the starting point for each unit depending on the needs and the ability of the class. This means that each year students revisit a topic, they start further along the progression through that topic

Implementation:

Year 1

Autumn I	Autumn II	Spring I	Spring II	Summer I	Summer II
In Autumn 1, year 1 pupils begin by reviewing their number recognition and formation, using this knowledge to learn to count up to 10. Once this is secured, pupils learn to add and subtract numbers up to 10, including number bonds to 10. At the end of Autumn 1, pupils learn the basics of movement in space. In particular, they learn to describe how people and objects may complete partial or full turns.	In Autumn 2, pupils build upon their counting skills, extending them with numbers up to 20. They also stretch their adding and subtracting skills with these new numbers. Number bonds are used to aid pupils and speed up the adding and subtracting processes. Pupils also learn new vocabulary pertaining to 2D and 3D shapes and learning to recognise the shapes themselves. **Content:**	In Spring 1, pupils learn the concepts of length, height and measurement. They use vocabulary to compare object size based on these two dimensions and also describe how some objects may be multiple times as long as others. Pupils then learn to count up to 40, building upon their counting and place value skills from Autumn. **Content:**	In Spring 2, pupils learn to use their addition and subtraction skills to solve word problems. They learn to associate certain words with either the operation of addition or subtraction, sometimes using both to solve longer problems. Pupils are then introduced to the concept of grouping, repeated addition and sharing equally in a mathematical context thus learning the skills of multiplication and division.	In Summer 1, pupils are introduced to the concept of dividing/sharing one object amongst multiple people or splitting it into multiple parts, thus learning fractions for the first time. They then consolidate prior learning of numbers and place value by learning how to count to 100. They then learn common means of measurement; measuring time and money and apply it to real-life problems. **Content:**	In Summer 2, pupils learn the concept of volume and capacity of liquids in their containers. They describe whether containers are full or empty. Pupils describe the capacity of objects in relation to other, smaller and more familiar objects. They also use their newfound knowledge of fractions to describe partially full containers. They continue their work on measurement by describing the mass of objects, thus

Content: - Counting to 10 - Comparing numbers up to 10 - Adding numbers up to 10 - Subtracting from numbers up to 10 - Number bonds to 10 - Position and movement; describing quarter, half and full turns	- Counting numbers to 20 - Comparing numbers up to 20 - Adding and subtracting numbers to 20 - Recognising and naming 2D shapes - Recognising and naming 3D shapes	- Measuring height and comparing object heights - Measuring length and comparing object lengths - Counting to 40 - Counting in 10s and 1s - Comparing and ordering numbers up to 40	**Content:** - Solving word problems involving addition and subtraction - Adding equal groups - Doubling - Sharing equally to divide	- Making Halves - Making Quarters - Sharing objects and parts of objects - Counting to 100 - Finding tens and ones - Making Number Patterns - Telling time to the hour - Telling time to the half hour - Ordering events - Comparing time	deciding which objects are heavier than others. Finally, pupils' knowledge of geometry is revisited by describing the positions and movements of objects and people in space. **Content:** - Comparing volume - Finding capacity - Describing volume with fractions - Comparing and finding mass - Describing positions of objects in space - Describing movements of objects in space.

Year 2				
Autumn I	**Autumn II**	**Spring I**	**Spring II**	**Summer I & Summer II**
At the start of Year 2, pupils review numbers up to 20, and extend this to numbers up to 100. Counting in 2s and 3s with number patterns help to reinforce their understanding of place value. Column method addition and subtraction with renaming is introduced for the first time. Pupils review equal groups and learn for the first time how this can be represented as multiplication. They apply this knowledge in	During this half-term, pupils review their understanding of grouping and sharing from Year 1 and learn how to form division sentences. Pupils learn how to divide by by 2, 5 and 10. After this, pupils focus on understand how to count, exchange and compare money and consolidate their understanding of addition and subtraction to solve money problems. **Content:**	Pupils move onto geometry in this half-term, revisiting simple 2D and 3D shapes and exploring shapes with more vertices and sides. Pupils learn how to draw shapes and their lines of symmetry and deepen understanding of how to move and turn shapes in different directions. With a good understanding of shapes, pupils learn new ways of representing fractions, including learning about thirds. Pupils strengthen their understanding and	Pupils move onto measurements in Spring 2, where there is greater focus on estimating lengths and using a ruler to measure. Pupils learn to differentiate centimetres and metres and apply their knowledge to word problems. Pupils learn how to measure the mass of objects in both grams and kilograms, and solve word problems involving different kinds of measurements. Pupils also consolidate their	In Summer 1, in preparation for the SATs exams, pupils review the topics covered throughout the year. The exams occur early in this particular half term. For the rest of the term and Summer 2, pupils focus on their completing and reviewing topics in preparation for Year 3. Pupils learn how to tell the time and draw different times to 5 minutes. This allows pupils to compare times more precisely and work out when events happen in relation to other events and their duration. Finally, pupils revisit how to compare the volume of liquid in different

learning the 2, 5 and 10 times table. **Content:** - Counting in tens and ones. - Comparing numbers up to 100 - Counting with number patterns - Adding numbers up to 100 - Subtracting numbers up to 100 - Multiplying by 2, 5 and 10. Solving word problems involving multiplication	- Grouping & Sharing - Dividing by 2, 5 and 10 - Solving word problems involving division - Counting money using notes and coins - Exchanging and comparing amounts of money. - Calculating total amounts. - Solving word problems involving money.	fluency of multiplication and division by finding different fractions of amounts. **Content:** - Identifying sides and vertices of 2D shapes - Identifying shapes with lines of symmetry - Sorting and drawing shapes - Making and describing patterns - Moving and turning shapes - Identifying 3D shapes - Showing halves, quarters and thirds - Naming fractions - Making 1 whole - Counting in halves, quarters and thirds - Finding part of a set and quantity	understanding of the four operations and learn how to represent word problems using bar models. **Content:** - Measuring lengths in metres and centimetres - Comparing lengths - Solving word problems involving length - Measuring mass in kilograms and grams - Comparing the mass of objects - Solving word problems involving mass. - Solving word problems involving addition and subtraction using bar models	containers and learn how to measure different volumes using standard units. Pupils apply their knowledge of volume to word problems. Pupils become more familiar with representing these word problems using bar models, so pupils understand conceptually how to choose the correct operation to solve problems. **Content:** - Writing and telling the time - Sequencing events - Drawing clock hands - Finding durations of time - Finding start times and end times - Comparing durations of times - Comparing and measuring volume in litres and millilitres - Solving word problems involving volume - Reading and estimating temperatures Pictograms

Year 3					
Autumn I	**Autumn II**	**Spring I**	**Spring II**	**Summer I**	**Summer II**
As year 3 begins, pupils practice and review place value skills learned in year 1 and 2, extending them to read and write numbers to 1,000, whilst also being able to count with number patterns, such as adding and taking away 50s. The same occurs with addition and subtraction, with year 3 pupils adding and subtracting numbers within 1,000, both with and without renaming. **Content:**	Once Addition and subtraction is complete, pupils will proceed to multiplication and division. Autumn 2 places a great emphasis on these topics. This begins with reviewing the 2, 5 and 10 times tables, which are covered in year 2. They move on to learning the 3, 4 and 8 times tables, also learning them “backwards” to help them when they move onto dividing.	In Spring 1, pupils begin practicing the basic fractions skills learned in year 2, before they learn how to count in tenths, eventually seeing fractions as representations of division. A great emphasis is placed upon finding equivalent fractions, before using this skill to compare and order fractions. The unit ends with adding and subtracting fractions and solving word problems involving fractions.	In Spring 2, pupils review and practice telling the time using clocks and eventually move on to measuring time with minutes, seconds, as well as hours and days. This is consolidated by converting between seconds and minutes. Pupils learn to find durations of events as well, thus practicing their problem-solving skills. Pupils continue the theme of measurement by learning how to measure, read	At the start of the summer term, pupils are introduced to statistics; namely reading pictograms and bar charts. This is followed by a unit of geometry, in which pupils learn the properties of 2D shapes and thus learn to recognise and label them. The	In Summer 2, pupils work on their last measurement-based topic, namely finding the perimeter of 2D shapes. This begins by measuring the sides of shapes, eventually moving on to using strategies to find overall perimeters for shapes such as

- Counting in hundreds, tens and ones - Comparing numbers up to 1,000 - Counting with number patterns - Adding numbers to 1,000 - Subtracting from numbers up to 1,000	When their times tables are secure, pupils move to both multiplying and dividing 2-digit numbers using formal written methods. Finally, these skills are used to solve worded problems. **Content:** - Multiplying by 3, 4 and 8 - Dividing by 3, 4 and 8 - Multiplying 2-digit numbers - Dividing 2-digit numbers - Solving word problems involving multiplication and division	Pupils then learn how to count money, especially understanding how 100 pence is equivalent to 1 pound. They then learn to add and subtract money, using these skills to solve worded reasoning questions. **Content:** - Counting in tenths - Fractions as division - Finding equivalent fractions - Comparing and ordering fractions - Adding and subtracting fractions - Counting Money - Adding and subtracting money	and write the length, mass and volume of objects with their respective units. **Content:** - Telling the time - Counting minutes and seconds - Finding the number of days - Finding durations - Measuring object lengths in metres, centimetres and millimetres. - Reading weighing scales with grams and kilograms - Measuring, reading and writing capacity in litres and millilitres	same applies to lines; namely identifying parallel, horizontal, perpendicular and vertical lines. Pupils then learn how to find angles and compare them in terms of angle size. **Content:** - Reading and drawing pictograms - Reading and drawing bar graphs - Properties of 2D shapes - Parallel, perpendicular, horizontal and vertical lines	rectangles. **Content:** - Measuring the sides of shapes - Measuring perimeters of shapes - Calculating perimeters of shapes

Year 4

Autumn I	Autumn II	Spring I	Spring II	Summer I	Summer II
At the start of year 4, place value skills that pupils have learned in previous years are revisited and built upon. Rounding numbers and estimation is taught for the first time, before pupils move on to consolidating their ability to add and subtract from previous years. **Content:** - Counting in 25s and 100s - Counting in 1000s, hundreds, 10s and 1s	A great deal of emphasis is placed upon multiplication and division at this stage of the academic year. Year 4 pupils will learn the times tables that have not been covered in previous years, consolidate their previous times table knowledge and eventually use it to learn and practice formal methods of multiplying and dividing larger numbers. **Content:** - Multiplying by 6, 7, 9, 11 and 12	Pupils revisit previous knowledge of fractions and build upon them, working with mixed numbers and improper fractions for the first time when adding and subtracting them. Pupils also learn how to find equivalent fractions, using this same skill to simplify them. Decimals are then introduced for the first time, feeding into previous place value skills (comparing, ordering and rounding decimals). Pupils also learn to convert between	The focus for Spring 2 is measurement. Pupils' newfound understanding of decimals will allow them to more easily access the topics of money, and unit conversion. They complete their work on measurement by consolidating previous knowledge of pictograms and bar graphs to learn how to read and draw line graphs. **Content:** - Four operations with amounts of money	Pupils start their last term by revisiting prior knowledge of time (reading clocks and converting between minutes, hours and seconds), before learning how to calculate the duration of an event. Once this is complete, pupils learn how to calculate the area and perimeters of 2D shapes. This is	Pupils revisit how to read bar and line graphs in order to learn how to read and plot points on a grid, thus describing the position and movement of shapes. This also serves to consolidate pupils' newfound knowledge of the different types of triangles and quadrilaterals. The last topic pupils learn

- Comparing and Ordering Numbers - Rounding and Estimating - Adding within 10,000 - Subtracting within 10,000	- Dividing by 6, 7, 9, 11 and 12 - Dividing with remainders - Multiplying by 0 and 1 - Dividing by 1 - Multiplying by multiples of 10 and 100 - Multiplying 2 and 3-digit numbers by 1-digit numbers - Dividing 2 and 3-digit numbers - Solving word problems involving multiplication and division	fractions and decimals, building an understanding of equivalence. **Content:** - Simplifying fractions - Equivalent fractions - Adding and subtracting fractions - Solving word problems involving fractions - Writing fractions as decimals - Comparing, ordering and rounding decimals	- Solving word problems involving money - Converting units of measurement (mass, length, volume) - Drawing and reading pictograms - Drawing and reading bar graphs - Drawing and reading line graphs	followed by learning facts pertaining to geometry. In particular, pupils learn how to identify different types of angles, triangles and quadrilaterals. **Content:** - Converting units of time (seconds, minutes, hours, days, weeks, months and years) - Calculating durations - Finding the perimeter of a shape - Finding the area of a shape - Identifying different types of angles - Identifying types of triangles - Identifying types of quadrilaterals	in year 4 is Roman numerals; specifically learning how to read and write Roman numerals from 1 to 100. Any remaining time in the year is spent revisiting topics from year 4 and ensuring that it is committed to pupils' long-term memory. **Content:** - Reading coordinates on a grid - Plotting coordinates on a grid - Describing movements on a grid - Roman numerals from 1 to 100.

Year 5					
Autumn I	**Autumn II**	**Spring I**	**Spring II**	**Summer I**	**Summer II**
In this half-term, using prior knowledge of 4-digit numbers, pupils build a solid understanding 5 and 6-digit numbers and their place values. Pupils consolidate understanding of simple operations using these numbers, and applying addition and subtraction to solve real-life problems. **Content** - Reading, writing and comparing numbers up to 1,000,000 - Number Patterns - Rounding - Addition and Subtraction within 1,000,000 - Multiples, factors and prime numbers - Square and cube numbers - Multiplying by multiples of 10 - Multiplying 2-digit numbers by 2-digit numbers	Pupils learn multiple methods when multiplying and dividing to develop fluency and build an in depth understanding of the reasons for each step of the process. Pupils represent their understanding using bar models to relate their understanding to real-life. Pupils revisit fractions and learn how to manipulate fractions of different denominators. **Content** - Multiplying 3-digit numbers by 2-digit numbers - Dividing by single digit numbers without/with a remainder - Solving one-step and multi-step word problems using bar models - Improper fractions, mixed numbers and equivalent fractions - Comparing & ordering fractions - Adding and subtracting fractions with like/unlike denominators	The focus for Spring 1 is decimals, where children consolidate their understanding of place value using tenths, hundredths and learn how to identify thousandths. Pupils perform addition and subtraction calculations using decimals across various contexts. Pupils learn percentages and apply knowledge of equivalent fractions, decimals and percentages to solve word problems. Pupils revisit line graphs and how to read data from tables in different real-life scenarios. **Content** - Reading, writing and comparing decimals - Decimal equivalents - Adding and subtracting decimals - Rounding - Writing percentages and equivalent percentages - Reading tables - Reading line graphs	Pupils learn about angles, particularly how to measure them using a protractor. Pupils revisit polygons and learn how to analyse figures and polygons and identify different angles within them. Pupils revisit grid coordinates, translations and reflections from Year 4 and learn how to identify multiple movements of polygons on a coordinate grid. **Content** - Types of angles - Measuring and drawing angles - Finding angles - Angles in quadrilaterals - Regular and irregular polygons - Grid coordinates - Translations and Reflections - Converting between units of length, mass and volume	Pupils continue to deepen their understanding of geometry, in particular, area, perimeter and volume. Pupils review knowledge and area and perimeter and learn how to manipulate complex shapes in order to estimate or find their area or perimeter. Pupils are introduced to the volume of solids for the first time, manipulating multi-link cubes to assist in their three-dimensional understanding. **Content** - Converting between metric and imperial units - Solving word problems involving measurements - Perimeter and area of shapes and composite shapes	Pupils revisit roman numerals from 1 to 1000 and review how to read negative numbers. Pupils review how to read line graphs and deepen their understanding of using line graphs to represent realistic data. Any remaining time in the year is spent revisiting topics from year 4 and ensuring that it is committed to pupils' long-term memory. **Content** - Negative Numbers - Roman Numerals - Revision of Key Topics

	- Multiplying fractions and mixed numbers by whole numbers.			- Estimating area - Volume of solids, cuboids and liquids - Solving problems involving volume	
Year 6					
Autumn I	**Autumn II**	**Spring I**	**Spring II**	**Summer I**	**Summer II**
The first half term of year 6 begins with pupils consolidating place value skills from previous years and extending their use to numbers up to 10 million. This is followed by a review of their knowledge of formal methods for the four operations and the order of operations. The half term ends with pupils using the four operations on fractions, including simplifying them. **Content:** - Reading and writing numbers to 10 million - Rounding numbers to the nearest 10, 100, 1000, 10,000, 100,000 and 1,000,000 - Order of operations, brackets and indices - Multiplying four-digit numbers by two-digit numbers	In Autumn 2, pupils will review prior knowledge of decimals. In particular, writing fractions as decimals and dividing whole numbers by multiples of 10, 100 and 1000, before they use these skills to multiply and divide decimals with formal written methods. Their knowledge of fractions and decimals is used to practice finding percentages of numbers, increasing and decreasing percentages. Problem solving skills are then emphasised with work on ratios and measurements, including converting between different units of measurement. **Content:** - Writing Fractions as Decimals - Dividing whole numbers by multiples of 10, 100 and 1000 - Multiplying and dividing decimals - Finding percentages of numbers	In Spring 1, pupils learn Algebra for the first time, using previously taught skills with bar modelling to help access the new knowledge. They use this newfound algebraic knowledge to solve word problems. Pupils then review finding area and perimeters of 2D shapes and begin work on statistics, in particular finding averages and presenting data on graphs. **Content:** - Writing algebraic equations - Solving algebraic equations - Using algebra to solve word problems - Finding the area and perimeter of 2D shapes - Statistics: finding the mean - Presenting data on bar graphs and line graphs	In Spring 2, pupils complete their work with statistics and averages, using knowledge of ratio and percentages to work with pie charts. They then work on geometry, first learning the properties of shapes and thus identifying different 2D and 3D shapes. They complete this unit by learning to find missing angles in shapes such as triangles and quadrilaterals. They then use their knowledge of 2D shapes to aid in describing position and movements of shapes on a grid. The year 6 curriculum finishes with pupils learning to find the volume of cuboids and working backwards to find missing single dimensions. **Content:** - Solving problems involving pie charts - Properties of 2D shapes - Properties of 3D shapes - Finding missing angles in shapes and across straight lines - Position and movement	In Summer 1, in preparation for the SATs exams, pupils review the topics covered throughout the year. The exams occur early in this particular half term. After these exams are complete, year 6 pupils practice using the knowledge they have gained to explore topics designed with the express purpose of enrichment, such as fractals seen in nature and measurement in sports.	The enrichment-focused lessons that year 6 pupils begin in Summer 1 continue into Summer 2. A transition unit is also covered, thus preparing the year 6 pupils for their secondary education phase.

- Dividing four-digit numbers by two-digit numbers - Adding and subtracting fractions with different denominators - Multiplying and dividing fractions - Simplifying fractions	- Finding percentage increases and decreases - Dividing and multiplying with ratios - Converting units of measurement		- Finding the volume of cuboids		

Enrichment Opportunities:

To further enrich the Mathematics curriculum, pupils are provided with regular opportunities to participate in a range of activities, including:

- **First Mathematics Challenge (Years 2 and 3):** Introduces younger pupils to mathematical problem-solving that encourage pupils to think outside the box and approach problems logically.
- **Primary Mathematics Challenge (Year 5):** A competition for pupils which encourages enthusiasm, boosts confidence in mathematics, and exposes pupils to different styles of questioning. High-scoring pupils are invited to take part in the Bonus Round.
- **Junior Mathematics Challenge (Year 6):** Pupils take part in this national competition, with high scorers invited to the next round, the Junior Kangaroo or Olympiad Challenge.
- **In-School Mathematics House Competition:** A whole-school event that fosters teamwork, enjoyment, and healthy competition in mathematics.
- **Times Table Champion Program**: A whole school program, where pupils take a times table test each half term to earn a badge.
- **Year 6 Maths Boosters**: After-school sessions where pupils practice and consolidate their mathematical skills.