2 Maths Curriculum Intent, Implementation and Impact

Maths is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

Strategic intent

To **develop a curriculum which** develops lively, enquiring minds encouraging pupils to become self-motivated, confident and capable in order to solve problems that will become an integral part of their future. The National Curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems

- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Our Maths Curriculum focuses on 3 different types of knowledge:

- **Declarative knowledge** – I know that……..(facts and formulae moving onto the relationship between them)
- **Procedural knowledge** – I know how…….. (methods moving onto the relationship between facts, procedures and missing facts)
- **Conditional Knowledge** – I know when…….(different strategies moving onto the relationship between information, strategies and missing information)

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should

also apply their mathematical knowledge to science and other subjects. The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice in 'Keep Up' sessions, before moving on.

Children deserve:

- To be set appropriate learning challenges
- To be taught well and be given the opportunity to learn in ways that maximise the chances of success.
- To have adults working with them to tackle the specific barriers to progress they face.

Implementation

Content and Sequence

A Maths Mastery approach is used to consolidate the building blocks that children need to study maths successfully and to a high level. There is a careful selection, sequencing and linking of declarative, procedural and conditional knowledge with a sequence of teaching and rehearsal which allows children to commit learning to their long-term memory. Children study mathematics daily covering a broad and balanced mathematical curriculum including elements of number, calculation, geometry, measures and statistics. Alongside daily maths sessions an additional 15 minutes a day is spent focusing on Fluent in Five (addition, subtraction, multiplication, division and fractions) and Rapid Reasoning to build fluency and precision in these areas and to think about numbers in a different way and how to address problems in the most efficient way. Due to the interconnected nature of mathematics, we aim to teach maths in a cross curricular manner as well as discretely to teach the practical application of mathematical skills. We focus not only on the mathematical methods but also focus on mathematical vocabulary and to use Maths Mastery to broaden and deepen mathematical understanding.

We aim for each child to be confident in each yearly objective and develop their ability to use this knowledge to develop a greater depth understanding to solve varied fluency problems as well as problem solving and reasoning questions. We use a range of textbooks, worksheets and online resources throughout the school to ensure a curriculum that is specific to each child's learning needs. Children complete their homework activities using the online homework resource Mathletics, which aims to build pupil engagement and consolidate maths knowledge.

As schools in England are required to administer an online multiplication tables check (MTC) to year 4 pupils we also use 'Times Table Rockstars' as an online and fun learning platform which also offer resources to be used in the classroom and also at home and helps to equip our children with times table fluency.

Within each aspect, children have the opportunity to acquire/refine, practise/apply, and extend/deepen their learning. Each level of challenge builds on prior learning and extends thinking.
Component steps are intentionally planned and set out daily so learning is cumulative, to give all children the opportunity for deliberate practice and the tools to reach a greater depth standard when appropriate. Maths learning is built using the Concrete, Pictorial and Abstract approach to learning, where children visually grasp the mathematical concepts covered prior to applying this to abstract learning and then beyond to conceptual variation.

Teaching and Learning, Assessment and Feedback

Starting points are identified through accurate teacher assessment, prior learning and/or as a result of summative testing. End points are taken as age related expectations at the end of each National Curriculum year.

The intended learning is always the focus of actions in the classroom. Activities and resources are carefully chosen and deliberately designed to focus effort towards practising the learning intentions.

Feedback is given is response to timely and continuous formative assessment in every lesson. Teachers use a range of formative assessment tools, including questions and observations to gauge children's level of understanding and knowledge. This is used to either offer support and scaffolds, or to give opportunities for greater challenge to deepen learning. Feedback is given in line with our feedback policy, including Green Pen Work to check, consolidate or challenge.

Starter and plenary activities allow children to become secure within their knowledge and skills. These are useful assessment opportunities: feedback is given to groups or the whole class as identified. Activities are used to revise previous content and address misconceptions as identified through observing children's work and responses and optimum use is made of 'Keep Up' sessions and in those cases where children are further behind 'Catch Up' sessions also. Assessments for SEN children are carefully used so as not to have a detrimental impact on the child's self confidence.

Impact

2017				2018				2019				2022				2023			
KS1		KS2		KS1		KS2		KS1		KS2		KS1		KS2		KS1		KS2	
Progress 2				Progress 0.2				Progress -1.2				Progress -1.4				Progress -1.0			
EXS (%)	GDS (%)	EXS (%)	GDS (%)	EXS (%)	GDS (%)	EXS (%)	GDS (%)	EXS (%)	GDS (%)	EXS (%)	GDS (%)	EXS (%)	GDS (%)	EXS (%)	GDS (%)	EXS (%)	GDS (%)	EXS (%)	GDS (%)
84	21	85	20	81	19	80	25	83	28	81	29	68	16	60	15	78	33	79	11

NB No validated data available for 2020 & 2021.

No ceiling is placed on any learner: teaching groups are flexible and adapted according to emerging learning needs and the level of support that is needed to enable all children to access the right curriculum content for their learning, whilst all strive to achieve end of year expectations. Children speak positively about the ability to drive their learning through self-assessment and the opportunities they have for extra practice time or additional challenge that the learning journey affords them.

Nearly all children leave Hanging Heaton CE (VC) J&I School having achieved at least the expected standard and as confident mathematicians, ready to take on the next stage in their education. High numbers achieve a greater depth within the standard. SEND children make at least expected progress and reach their attainment targets.

Disadvantaged children make progress that is in line with their peers.

Children leave Hanging Heaton VC (CE) J&I School as confident, capable mathematicians and with a positive attitude towards maths.

2.1 Maths Early Years Progression Charts

The first few years of a child's life are especially important for mathematics development. Research shows that early mathematical knowledge predicts later reading ability and general education and social progress. Conversely, children who start behind in mathematics tend to stay behind throughout their whole educational journey.

The objective for those working in Early Years, then, is to ensure that all children develop firm mathematical foundations in a way that is engaging, and appropriate for their age. The materials here are primarily designed to support Reception teachers (those working with 4-5 year olds), and are based on international research.

The materials are organised into key concepts (not individual objectives), which underpin many early mathematics curricula. The typical progression highlights the range of experiences (some of which may be appropriate for younger children) but the activities and opportunities could be developed across the Reception provision.

There are six key areas of early mathematics learning, which collectively provide a platform for everything children will encounter as they progress through their maths learning at primary school, and beyond.

Cardinality and Counting: Understanding that the cardinal value of a number refers to the quantity, or 'howmanyness' of things it represents

- **Counting:** saying number words in sequence
- **Counting**: tagging each object with one number word
- **Counting:** knowing the last number counted gives the total so far
- **Subitising**: recognising small quantities without needing to count them all
- **Numeral meanings**
- **Conservation:** knowing that the number does not change if things are rearranged (as long as none have been added or taken away)

Comparison: Understanding that comparing numbers involves knowing which numbers are worth more or less than each other

- **More than/less than**
- **Identifying groups with the same number of things**
- **Comparing numbers and reasoning**

- **Knowing the 'one more than/one less than' relationship**

Composition: Understanding that one number can be made up from (composed from) two or more smaller numbers

- **Part–whole:** identifying smaller numbers within a number (conceptual subitising – seeing groups and combining to a total)
- **Inverse operations**
- **A number can be partitioned into different pairs of number**
- **A number can be partitioned into more than two numbers**
- **Number bonds: knowing which pairs make a given number**

Pattern: Looking for and finding patterns helps children notice and understand mathematical relationships

- **Continuing an AB pattern**
- **Copying an AB pattern**
- **Make their own AB pattern**
- **Spotting an error in an AB pattern**
- **Identifying the unit of repeat**
- **Continuing an ABC pattern**
- **Continuing a pattern which ends mid-unit**
- **Make their own ABB, ABBC patterns**
- **Spotting an error in an ABB pattern**
- **Symbolising the unit structure**
- **Generalising structures to another context or mode**
- **Making a pattern which repeats around a circle**
- **Making a pattern around a border with a fixed number of space**
- **Pattern-spotting around us**

Shape and Space: Understanding what happens when shapes move, or combine with other shapes, helps develop wider mathematical thinking

- **Developing spatial awareness: experiencing different viewpoint**
- **Developing spatial vocabulary**
- **Shape awareness: developing shape awareness through construction**
- **Representing spatial relationships**
- **Identifying similarities between shapes**

- **Showing awareness of properties of shape**
- **Describing properties of shape**
- **Developing an awareness of relationships between shapes**

Measure: Comparing different aspects such as length, weight and volume, as a preliminary to using units to compare later.

- **Recognising attributes**
- **Comparing amounts of continuous quantities**
- **Showing awareness of comparison in estimating and predicting**
- **Comparing indirectly**
- **Recognising the relationship between the size and number of units**
- **Beginning to use units to compare things**
- **Beginning to use time to sequence events**
- **Beginning to experience specific time durations**

3-4 years

- Fast recognition of up to 3 objects, without having to count them individually ('subitising').
- Recite numbers past 5.
- Say one number for each item in order: 1,2,3,4,5.
- Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').
- Show 'finger numbers' up to 5.
- Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.
- Experiment with their own symbols and marks as well as numerals.
- Solve real world mathematical problems with numbers up to 5.
- Compare quantities using language: 'more than', 'fewer than'.
- Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'.
- Understand position through words alone – for example, "The bag is under the table," – with no pointing.
- Describe a familiar route.
- Discuss routes and locations, using words like 'in front of' and 'behind'.
- Make comparisons between objects relating to size, length, weight and capacity
- Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc.
- Combine shapes to make new ones – an arch, a bigger triangle etc.

- Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc.
- Extend and create ABAB patterns – stick, leaf, stick, leaf.
- Notice and correct an error in a repeating pattern.
- Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'

Reception

- Count objects, actions and sounds.
- Subitise.
- Link the number symbol (numeral) with its cardinal number value
- Count beyond ten.
- Compare numbers
- Understand the 'one more than/one less than' relationship between consecutive numbers.
- Explore the composition of numbers to 10.
- Automatically recall number bonds for numbers 0–10.
- Select, rotate and manipulate shapes in order to develop spatial reasoning skills.
- Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.
- Continue, copy and create repeating patterns.
- Compare length, weight and capacity.

Early Learning Goals Number & Numerical Patterns

- Have a deep understanding of number to 10, including the composition of each number.
- Subitise (recognise quantities without counting) up to 5.
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.
- Verbally count beyond 20, recognising the pattern of the counting system.
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other Quantity`.
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally

2.2 Progression

Primary Progression – Place Value

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value: Counting	• count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • Count numbers to 100 in numerals; count in multiples of twos, fives and tens **Autumn 1 Autumn 4 Spring 2 Summer 4**	• count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward **Autumn 1**	• count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number **Autumn 1 Autumn 3**	• count in multiples of 6, 7, 9, 25 and 1000 • count backwards through zero to include negative numbers **Autumn 1 Autumn 4**	• count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 • count forwards and backwards with positive and negative whole numbers, including through zero **Autumn 1**	
Place Value: Represent	• identify and represent numbers using objects and pictorial representations • read and write numbers to 100 in numerals • read and write numbers from 1 to 20 in numerals and words. **Autumn 1 Autumn 4 Spring 2 Summer 4**	• 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 **Autumn 1**	• identify, represent and estimate numbers using different representations • read and write numbers up to 1000 in numerals and in words **Autumn 1**	• identify, represent and estimate numbers using different representations • 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**	• read, write, (order and compare) numbers to at least 1 000 000 and determine the value of each digit • read Roman numerals to 1000 (M) and recognise years written in Roman numerals. **Autumn 1**	• read, write, (order and compare) numbers up to 10 000 000 and determine the value of each digit **Autumn 1**

Primary Progression – Place Value

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Place Value : Use PV and Compare	• given a number, identify one more and one less **Autumn 1** **Autumn 4** **Spring 2** **Summer 4**	• 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 **Autumn 1**	• recognise the place value of each digit in a three-digit number (hundreds, tens, ones) • compare and order numbers up to 1000 **Autumn 1**	• find 1000 more or less than a given number • recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) • order and compare numbers beyond 1000 **Autumn 1**	• (read, write) order and compare numbers to at least 1 000 000 and determine the value of each digit **Autumn 1**	• (read, write), order and compare numbers up to 10 000 000 and determine the value of each digit **Autumn 1**
Place Value: Problems& Rounding		• use place value and number facts to solve problems. **Autumn 1**	• solve number problems and practical problems involving these ideas **Autumn 1**	• round any number to the nearest 10, 100 or 1000 • solve number and practical problems that involve all of the above and with increasingly large positive numbers **Autumn 1**	• interpret negative numbers in context • round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 • solve number problems and practical problems that involve all of the above **Autumn 1**	• round any whole number to a required degree of accuracy • use negative numbers in context, and calculate intervals across zero • solve number and practical problems that involve all of the above **Autumn 1**

Primary Progression – Addition & Subtraction

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition & Subtraction: Recall, Represent, Use	• read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs • represent and use number bonds and related subtraction facts within 20 **Autumn 2** **Spring 1**	• recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 • show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot • recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems **Autumn 2**	• estimate the answer to a calculation and use inverse operations to check answers **Autumn 2**	• estimate and use inverse operations to check answers to a calculation **Autumn 2**	• use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy **Autumn 2**	

Primary Progression – Addition & Subtraction

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition & Subtraction: Calculations	• add and subtract one-digit and two-digit numbers to 20, including zero Autumn 2 Spring 1	• 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 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 Autumn 2	• 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 whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) • add and subtract numbers mentally with increasingly large numbers Autumn 2	• perform mental calculations, including with mixed operations and large numbers • use their knowledge of the order of operations to carry out calculations involving the four operations Autumn 2

Primary Progression – Addition & Subtraction

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition & Subtraction: Solve Problems	• solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ – 9 **Autumn 2 Spring 1**	• solve problems with addition and subtraction: ➢ using concrete objects and pictorial representations, including those involving numbers, quantities and measures ➢ applying their increasing knowledge of mental and written methods **Autumn 2**	• solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction **Autumn 2**	• solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why **Autumn 2**	• solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign **Autumn 2**	• solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why **Autumn 2**

Primary Progression – Multiplication & Division

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication & Division: Recall, Represent, Use		• recall and use multiplication and division facts for the 2, 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 **Autumn 4 Spring 1**	• recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables **Autumn 3**	• recall multiplication and division facts for multiplication tables up to 12 × 12 • 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 • recognise and use factor pairs and commutativity in mental calculations **Autumn 4 Spring 1**	• identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers • establish whether a number up to 100 is prime and recall prime numbers up to 19 • recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3}) **Autumn 4**	• identify common factors, common multiples and prime numbers • use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. **Autumn 2**

Primary Progression – Multiplication & Division

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication & Division: Calculations		• calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs **Autumn 4** **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 **Autumn 3** **Spring 1**	• multiply two-digit and three-digit numbers by a one-digit number using formal written layout **Spring 1**	• multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers • multiply and divide numbers mentally drawing upon known facts • divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context • multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 **Autumn 4** **Spring 1** **Summer 1**	• multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication • divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context • divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context • perform mental calculations, including with mixed operations and large numbers **Autumn 2**

Primary Progression – Multiplication & Division

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication & Division: Solve Problems	• solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher **Summer 1**	• solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts **Autumn 4** **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**	• 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 involving multiplication and division including using their knowledge of factors and multiples, squares and cubes • solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates **Autumn 4** **Spring 1**	• solve problems involving addition, subtraction, multiplication and division **Autumn 2**
Multiplication & Division: Combined Operations					• solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign **Spring 1**	• use their knowledge of the order of operations to carry out calculations involving the four operations **Autumn 2**

Primary Progression – Fractions, Decimals, Percentages

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions: Recognise and Write	• recognise, find and name a half as one of two equal parts of an object, shape or quantity • recognise, find and name a quarter as one of four equal parts of an object, shape or quantity **Summer 2**	• recognise, find, name and write fractions $\frac{1}{3}, \frac{1}{4}, \frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity **Spring 4**	• 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, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators • recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators **Spring 5**	• count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. **Spring 3**	• identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths • recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$] **Spring 2**	
Fractions: Compare		• Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ **Spring 4**	• recognise and show, using diagrams, equivalent fractions with small denominators • compare and order unit fractions, and fractions with the same denominators **Summer 1**	• recognise and show, using diagrams, families of common equivalent fractions **Spring 3**	• compare and order fractions whose denominators are all multiples of the same number **Spring 2**	• use common factors to simplify fractions; use common multiples to express fractions in the same denomination • compare and order fractions, including fractions > 1 **Autumn 3**

Primary Progression – Fractions, Decimals, Percentages

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions: Calculations		• write simple fractions for example, $\frac{1}{2}$ of 6 = 3 **Spring 4**	• add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7}+\frac{1}{7}=\frac{6}{7}$] **Summer 1**	• add and subtract fractions with the same denominator **Spring 3**	• add and subtract fractions with the same denominator and denominators that are multiples of the same number • multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams **Spring 3**	• add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions • multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4}\times\frac{1}{2}=\frac{1}{8}$] • divide proper fractions by whole numbers [for example, $\frac{1}{3}\div 2=\frac{1}{6}$] **Autumn 3**
Fractions: Solve Problems			• solve problems that involve all of the above **Spring 5** **Summer 1**	• solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number **Spring 3**		

Primary Progression – Fractions, Decimals, Percentages

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Decimals: Recognise and Write				• recognise and write decimal equivalents of any number of tenths or hundredths • recognise and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$ **Spring 4** **Summer 1**	• read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$] • recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents **Spring 3**	• identify the value of each digit in numbers given to three decimal places **Spring 1**
Decimals: Compare				• round decimals with one decimal place to the nearest whole number • compare numbers with the same number of decimal places up to two decimal places **Summer 1**	• round decimals with two decimal places to the nearest whole number and to one decimal place • read, write, order and compare numbers with up to three decimal places **Spring 3**	

Primary Progression – Fractions, Decimals, Percentages

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Decimals: Calculations & Problems				• find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths **Spring 4**	• solve problems involving number up to three decimal places **Summer 1**	• multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places • multiply one-digit numbers with up to two decimal places by whole numbers • use written division methods in cases where the answer has up to two decimal places • solve problems which require answers to be rounded to specified degrees of accuracy **Spring 1**

Primary Progression – Fractions, Decimals, Percentages

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions, Decimals and Percentages				• solve simple measure and money problems involving fractions and decimals to two decimal places Spring 3 Spring 4 Summer 1	• recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal • solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25 Spring 3	• associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$] • recall and use equivalences between simple fractions, decimals and percentages, including in different contexts Spring 1 Spring 2

Primary Progression – Ratio and Proportion

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Ratio and Proportion						• solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts • solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison • solve problems involving similar shapes where the scale factor is known or can be found • solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. Spring 6

Primary Progression – Algebra

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Algebra	• solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ – 9	• 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			• use simple formulae • generate and describe linear number sequences • express missing number problems algebraically • find pairs of numbers that satisfy an equation with two unknowns • enumerate possibilities of combinations of two variables. **Spring 3**

Note – although algebraic notation is not introduced until Y6, algebraic thinking starts much earlier as exemplified by the 'missing number' objectives from Y1/2/3

Primary Progression – Measurement

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Using Measures	• compare, describe and solve practical problems for: ➢ lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] ➢ mass/weight [for example, heavy/light, heavier than, lighter than] ➢ capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] ➢ time [for example, quicker, slower, earlier, later] • measure and begin to record the following: ➢ lengths and heights ➢ mass/weight ➢ capacity and volume ➢ time (hours, minutes, seconds) **Spring 3** **Spring 4** **Summer 6**	• 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 = **Spring 5** **Summer 4**	• measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) **Spring 4** **Summer 4**	• Convert between different units of measure [for example, kilometre to metre; hour to minute] • estimate, compare and calculate different measures **Autumn 3** **Spring 2** **Summer 3**	• convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) • understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints • use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling **Summer 1** **Summer 4** **Summer 5**	• solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate • use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places • convert between miles and kilometres **Spring 4**

Primary Progression – Measurement

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Money	• recognise and know the value of different denominations of coins and notes Summer 5	• 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 Autumn 3	• add and subtract amounts of money to give change, using both £ and p in practical contexts Spring 2	• estimate, compare and calculate different measures, including money in pounds and pence Summer 2	• use all four operations to solve problems involving measure [for example, money] Summer 1	

Primary Progression – Measurement

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Time	• sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] • recognise and use language relating to dates, including days of the week, weeks, months and years • tell the time to the hour and half past the hour and draw the hands on a clock face to show these times **Summer 6**	• 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 **Summer 3**	• 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] **Summer 2**	• read, write and convert time between analogue and digital 12- and 24-hour clocks • solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days **Summer 3**	• solve problems involving converting between units of time **Summer 4**	• use, read, write and convert between standard units, converting measurements of time from a smaller unit of measure to a larger unit, and vice versa **Year 5 Summer 4**

Primary Progression – Measurement

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement: Perimeter, Area, Volume			• measure the perimeter of simple 2-D shapes **Spring 4**	• measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres • find the area of rectilinear shapes by counting squares **Autumn 3** **Spring 2**	• measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres • calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes • estimate volume [for example, using 1 cm^3 blocks to build cuboids (including cubes)] and capacity [for example, using water] **Autumn 5** **Summer 5**	• recognise that shapes with the same areas can have different perimeters and vice versa • recognise when it is possible to use formulae for area and volume of shapes • calculate the area of parallelograms and triangles • calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3] **Spring 5**

Primary Progression – Geometry

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: 2-D Shapes	• recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles] **Autumn 3**	• 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 **Spring 3**	• draw 2-D shapes **Summer 3**	• compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • identify lines of symmetry in 2-D shapes presented in different orientations **Summer 5**	• distinguish between regular and irregular polygons based on reasoning about equal sides and angles. • use the properties of rectangles to deduce related facts and find missing lengths and angles **Summer 2**	• draw 2-D shapes using given dimensions and angles • compare and classify geometric shapes based on their properties and sizes • illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius **Summer 1**
Geometry: 3-D Shapes	• recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres] **Autumn 3**	• recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]. • compare and sort common 3-D shapes and everyday objects **Spring 3**	• make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them **Summer 3**		• identify 3-D shapes, including cubes and other cuboids, from 2-D representations **Summer 2**	• recognise, describe and build simple 3-D shapes, including making nets **Summer 1**

Primary Progression – Geometry

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: Angles & Lines			• 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 **Summer 3**	• identify acute and obtuse angles and compare and order angles up to two right angles by size • identify lines of symmetry in 2-D shapes presented in different orientations • complete a simple symmetric figure with respect to a specific line of symmetry **Summer 5**	• know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles • draw given angles, and measure them in degrees • identify: ➢ angles at a point and one whole turn (total 360°) ➢ angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) ➢ other multiples of 90° **Summer 2**	• find unknown angles in any triangles, quadrilaterals, and regular polygons • recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles **Summer 1**

Primary Progression – Geometry

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Geometry: Position & Direction	• describe position, direction and movement, including whole, half, quarter and three-quarter turns **Summer 3**	• order and arrange combinations of mathematical objects in patterns and sequences • use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise) **Spring 3** **Summer 1**		• describe positions on a 2-D grid as coordinates in the first quadrant • describe movements between positions as translations of a given unit to the left/right and up/down • plot specified points and draw sides to complete a given polygon **Summer 6**	• identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed **Summer 3**	• describe positions on the full coordinate grid (all four quadrants) • draw and translate simple shapes on the coordinate plane, and reflect them in the axes **Autumn 4**

Primary Progression – Statistics

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Statistics: Present and Interpret		• interpret and construct simple pictograms, tally charts, block diagrams and simple tables **Spring 2**	• interpret and present data using bar charts, pictograms and tables **Spring 3**	• interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs **Summer 4**	• complete, read and interpret information in tables, including timetables **Autumn 3**	• interpret and construct pie charts and line graphs and use these to solve problems **Summer 3**
Statistics: Solve Problems		• 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 **Spring 2**	• 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 **Spring 3**	• solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs **Summer 4**	• solve comparison, sum and difference problems using information presented in a line graph **Autumn 3**	• calculate and interpret the mean as an average **Summer 3**

2.3 Maths End Points By Year - EYFS:

Reception EYFS Maths Name:
3 – 4 years
• Fast recognition of up to 3 objects, without having to count them individually ('subitising').
• Recite numbers past 5.
• Say one number for each item in order: 1,2,3,4,5.
• Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').
• Show 'finger numbers' up to 5.
• Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.
• Experiment with their own symbols and marks as well as numerals.
• Solve real world mathematical problems with numbers up to 5.
• Compare quantities using language: 'more than', 'fewer than'.
• Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'.
• Understand position through words alone – for example, "The bag is under the table," – with no pointing.
• Describe a familiar route.
• Discuss routes and locations, using words like 'in front of' and 'behind
• Make comparisons between objects relating to size, length, weight and capacity
• Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc
• Combine shapes to make new ones – an arch, a bigger triangle etc.
• Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc.
• Extend and create ABAB patterns – stick, leaf, stick, leaf.
• Notice and correct an error in a repeating pattern.
• Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'
Reception
• Count objects, actions and sounds.
• Subitise.
• Link the number symbol (numeral) with its cardinal number value
• Count beyond ten.
• Compare numbers
• Understand the 'one more than/one less than' relationship between consecutive numbers.
• Explore the composition of numbers to 10.
• Automatically recall number bonds for numbers 0–10.
• Select, rotate and manipulate shapes in order to develop spatial reasoning skills.
• Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.
• Continue, copy and create repeating patterns.
• Compare length, weight and capacity.
ELGs - Number
• Have a deep understanding of number to 10, including the composition of each number.
• Subitise (recognise quantities without counting) up to 5.
• Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.
ELGs – Numerical Patterns
• Verbally count beyond 20, recognising the pattern of the counting system.
• Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other Quantity`.
• Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally

Year 1 Maths Curriculum
Numbers and the number system
count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens given a number, identify one more and one less
identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
read and write numbers from 1 to 20 in numerals and words
Addition and subtraction
read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs
represent and use number bonds and related subtraction facts within 20
add and subtract one-digit and two-digit numbers to 20, including zero
solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = _ – 9
Multiplication and division
solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
Fractions and decimals
recognise, find and name a half as one of two equal parts of an object, shape or quantity
recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.
Measurement
compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] mass/weight [for example, heavy/light, heavier than, lighter than] capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] time [for example, quicker, slower, earlier, later]
measure and begin to record the following: lengths and heights mass/weight capacity and volume time (hours, minutes, seconds)
recognise and know the value of different denominations of coins and notes
sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
recognise and use language relating to dates, including days of the week, weeks, months and years
tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
Geometry
recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles] 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]
Describe position, direction and movement, including whole, half, quarter and three-quarter turns

Year 2 Maths Curriculum:
Numbers and the number system
count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
recognise the place value of each digit in a two-digit number (tens, ones)
identify, represent and estimate numbers using different representations, including the number line
compare and order numbers from 0 up to 100; use <, > and = signs
read and write numbers to at least 100 in numerals and in words
use place value and number facts to solve problems.
Addition and subtraction
solve problems with addition and subtraction:
using concrete objects and pictorial representations, including those involving numbers, quantities and measures
applying their increasing knowledge of mental and written methods
recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100
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
show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
Multiplication and division
recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs
show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts
Fractions and decimals
recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity
write simple fractions for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and 1/2
Measurement
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 =
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
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.
Geometry
identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line
identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces
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 and 3-D shapes and everyday objects.
order and arrange combinations of mathematical objects in patterns and sequences
use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)
Statistics
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.

Year 3 Maths Curriculum
Numbers and the number system
count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
compare and order numbers up to 1000
identify, represent and estimate numbers using different representations
read and write numbers up to 1000 in numerals and in words
solve number problems and practical problems involving these ideas.
Addition and subtraction
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
estimate the answer to a calculation and use inverse operations to check answers
solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction
Multiplication and division
recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
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
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 and decimals
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
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 use fractions as numbers: unit fractions and non-unit fractions with small denominators
recognise and show, using diagrams, equivalent fractions with small denominators
add and subtract fractions with the same denominator within one whole [for example, 1/7 + 3/7 = 4/7]
compare and order unit fractions, and fractions with the same denominators
solve problems that involve all of the above.
Measurement
measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
measure the perimeter of simple 2-D shapes
add and subtract amounts of money to give change, using both £ and p in practical contexts
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].
Geometry
draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
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.
Statistics
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.

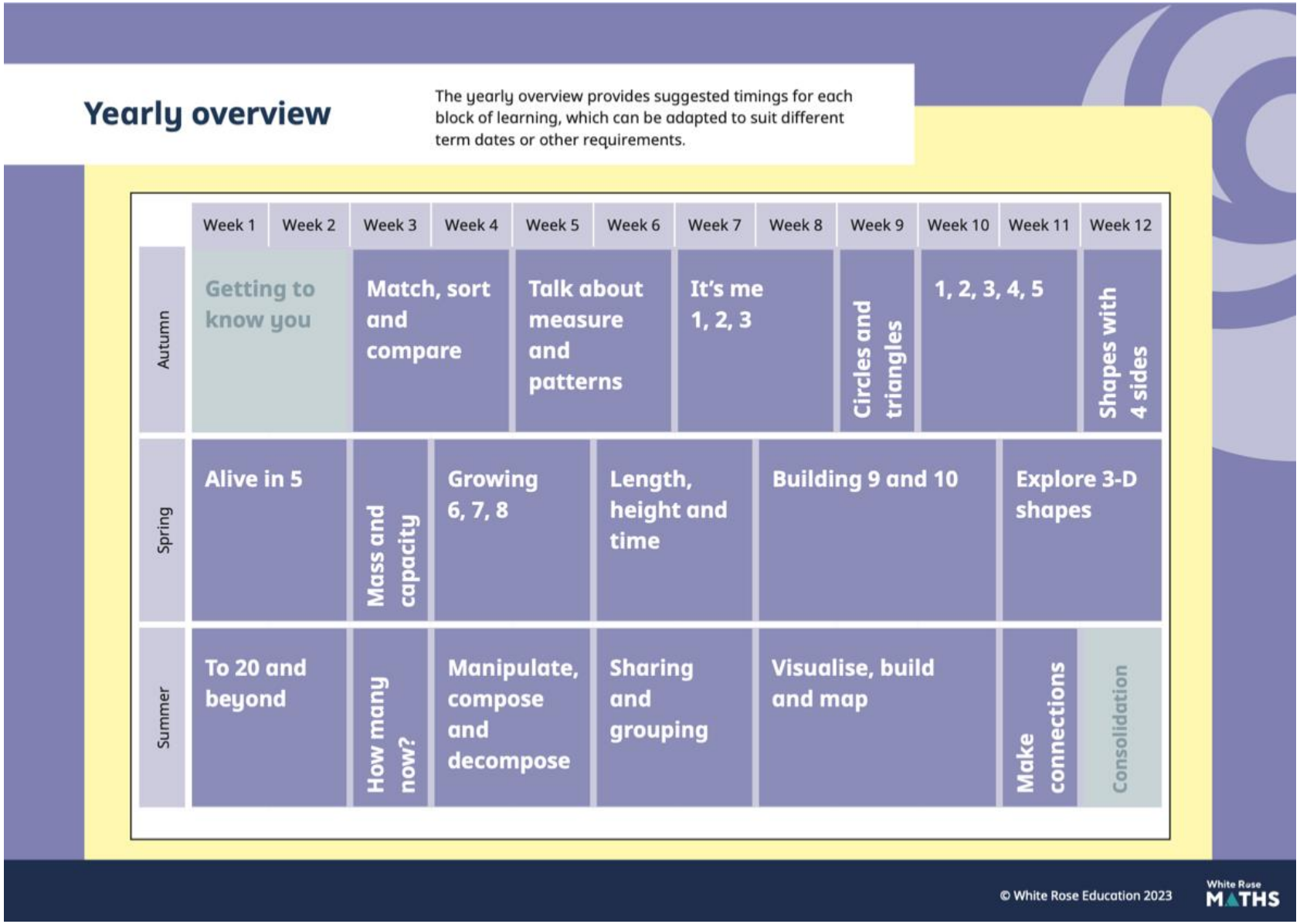
Year 4 Maths Curriculum
Numbers and the number system
count in multiples of 6, 7, 9, 25 and 1000
find 1000 more or less than a given number
count backwards through zero to include negative numbers
recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
order and compare numbers beyond 1000
identify, represent and estimate numbers using different representations
round any number to the nearest 10, 100 or 1000
solve number and practical problems that involve all of the above and with increasingly large positive numbers
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
Addition and subtraction
add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
estimate and use inverse operations to check answers to a calculation
solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why
Multiplication and division
recall multiplication and division facts for multiplication tables up to 12 × 12
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
recognise and use factor pairs and commutativity in mental calculations
multiply two-digit and three-digit numbers by a one-digit number using formal written layout
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.
Fractions and decimals
recognise and show, using diagrams, families of common equivalent fractions
count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number
add and subtract fractions with the same denominator
recognise and write decimal equivalents of any number of tenths or hundredths
recognise and write decimal equivalents to ¼, ½, ¾
find the effect of dividing a one- or two-digit number by 10 and 100, identifying the
value of the digits in the answer as ones, tenths and hundredths
round decimals with one decimal place to the nearest whole number
compare numbers with the same number of decimal places up to two decimal places
solve simple measure and money problems involving fractions and decimals to two decimal places.
Measurement
Convert between different units of measure [for example, kilometre to metre; hour to minute]
measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
find the area of rectilinear shapes by counting squares
estimate, compare and calculate different measures, including money in pounds and Pence
read, write and convert time between analogue and digital 12- and 24-hour clocks
solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
Geometry
compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
identify acute and obtuse angles and compare and order angles up to two right angles by size
identify lines of symmetry in 2-D shapes presented in different orientations
complete a simple symmetric figure with respect to a specific line of symmetry. describe positions on a 2-D grid as coordinates in the first quadrant
describe movements between positions as translations of a given unit to the left/right and up/down
plot specified points and draw sides to complete a given polygon.
Statistics
interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

Year5 Maths Curriculum
Numbers and the number system
read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
solve number problems and practical problems that involve all of the above
read Roman numerals to 1000 (M) and recognise years written in Roman numerals.
Addition and subtraction
add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
add and subtract numbers mentally with increasingly large numbers
use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
Multiplication and division
identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
establish whether a number up to 100 is prime and recall prime numbers up to 19
multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers
multiply and divide numbers mentally drawing upon known facts
divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context
multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
recognise and use square numbers and cube numbers, and the notation for squared and cubed
solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates
Fractions and decimals
compare and order fractions whose denominators are all multiples of the same number
identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths
recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number
add and subtract fractions with the same denominator and denominators that are multiples of the same number
multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
read and write decimal numbers as fractions [for example, 0.71 = 71/100]
recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
round decimals with two decimal places to the nearest whole number and to one decimal place
read, write, order and compare numbers with up to three decimal places
solve problems involving number up to three decimal places
recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5 and 4/5 and those fractions with a denominator of a multiple of 10 or 25.
Measurement
convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes
estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]
solve problems involving converting between units of time
use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling
Geometry
identify 3-D shapes, including cubes and other cuboids, from 2-D representations
know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
draw given angles, and measure them in degrees (o)
identify: angles at a point and one whole turn (total 360o) , angles at a point on a straight line and , 1/2 a turn (total 180o) other multiples of 90o
use the properties of rectangles to deduce related facts and find missing lengths and angles
distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed
Statistics
solve comparison, sum and difference problems using information presented in a line graph
complete, read and interpret information in tables, including timetables

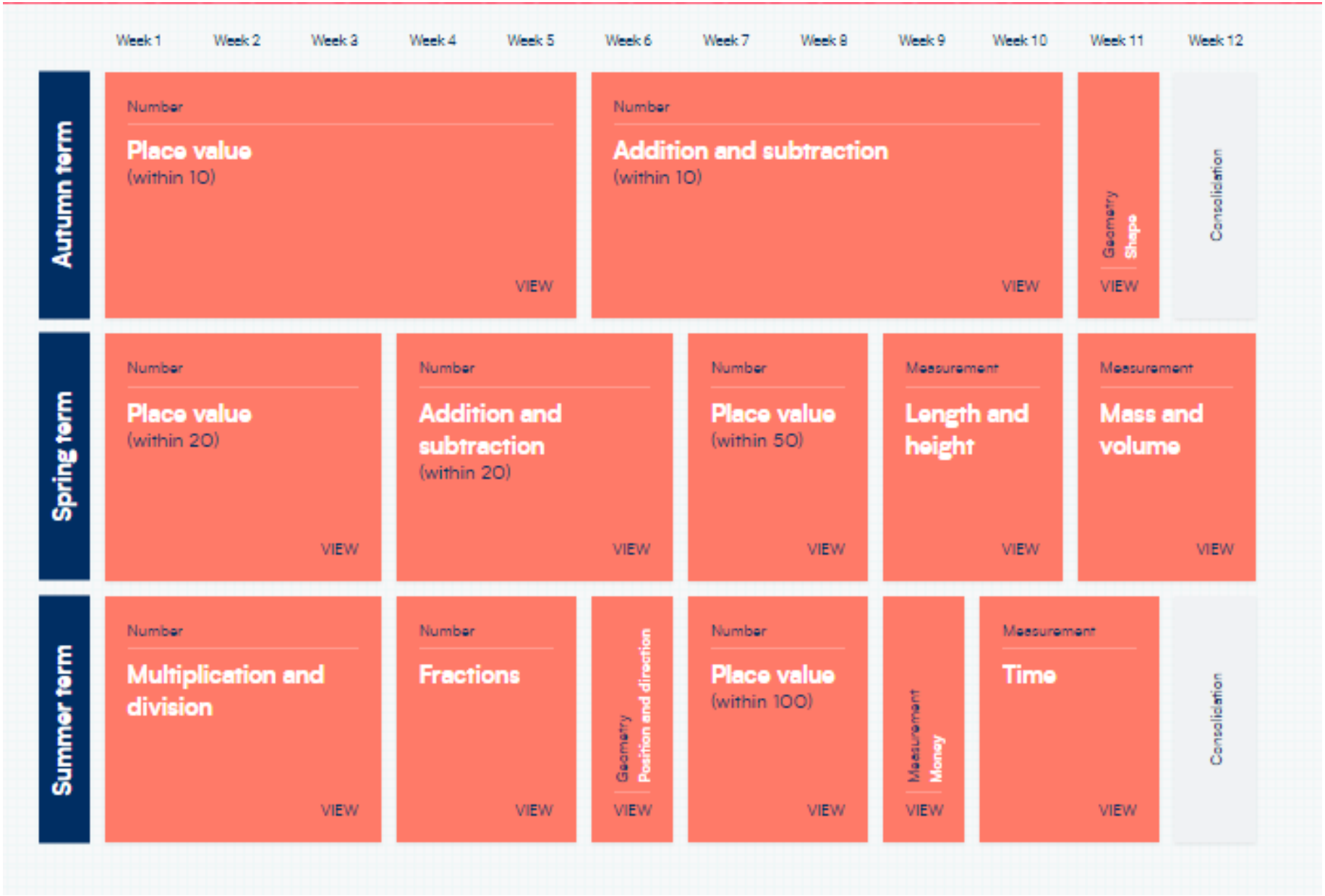
Year 6 Maths Curriculum
Numbers and the number system
read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
round any whole number to a required degree of accuracy
use negative numbers in context, and calculate intervals across zero
solv e number and practical problems that involve all of the above
Addition, subtraction, multiplication and division
multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication perform mental calculations, including with mixed operations and large numbers
divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
identify common factors, common multiples and prime numbers
use their knowledge of the order of operations to carry out calculations involving the four operations
solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
solve problems involving addition, subtraction, multiplication and division
use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
Fractions and decimals
use common factors to simplify fractions; use common multiples to express fractions in the same denomination □
compare and order fractions, including fractions > 1
add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, ¼ x ½ = 1/8]
divide proper fractions by whole numbers [for example, 1/3 ÷ 2 = 1/6]
associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]
identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
multiply one-digit numbers with up to two decimal places by whole numbers
use written division methods in cases where the answer has up to two decimal places
solve problems which require answers to be rounded to specified degrees of accuracy
recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
Ratio and Proportion
solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
solve problems involving similar shapes where the scale factor is known or can be found
solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
Algebra
use simple formulae
generate and describe linear number sequences
express missing number problems algebraically
find pairs of numbers that satisfy an equation with two unknowns
enumerate possibilities of combinations of two variables.
Measurement
solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places
convert between miles and kilometres
recognise that shapes with the same areas can have different perimeters and vice versa
recognise when it is possible to use formulae for area and volume of shapes
calculate the area of parallelograms and triangles
calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other unit[for example, mm3 and km3].
Geometry
draw 2-D shapes using given dimensions and angles
recognise, describe and build simple 3-D shapes, including making nets
compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons
illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
describe positions on the full coordinate grid (all four quadrants)
draw and translate simple shapes on the coordinate plane, and reflect them in the axes
Statistics
interpret and construct pie charts and line graphs and use these to solve problems
calculate and interpret the mean as an average.

2.4 Maths Teaching Sequences Summary

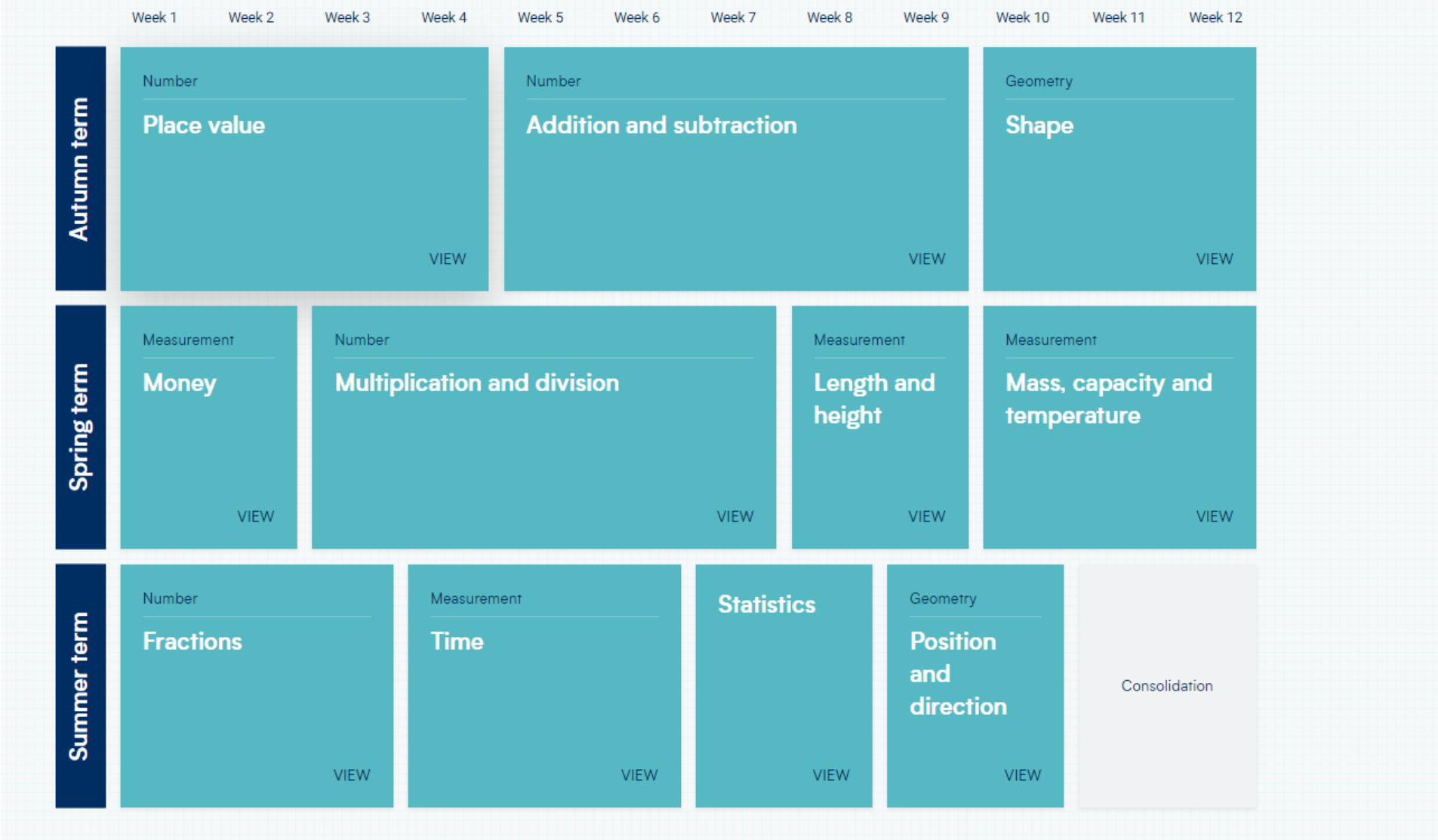
Class 1 – Reception/Year 1 – To be taught as two different lessons - EYFS



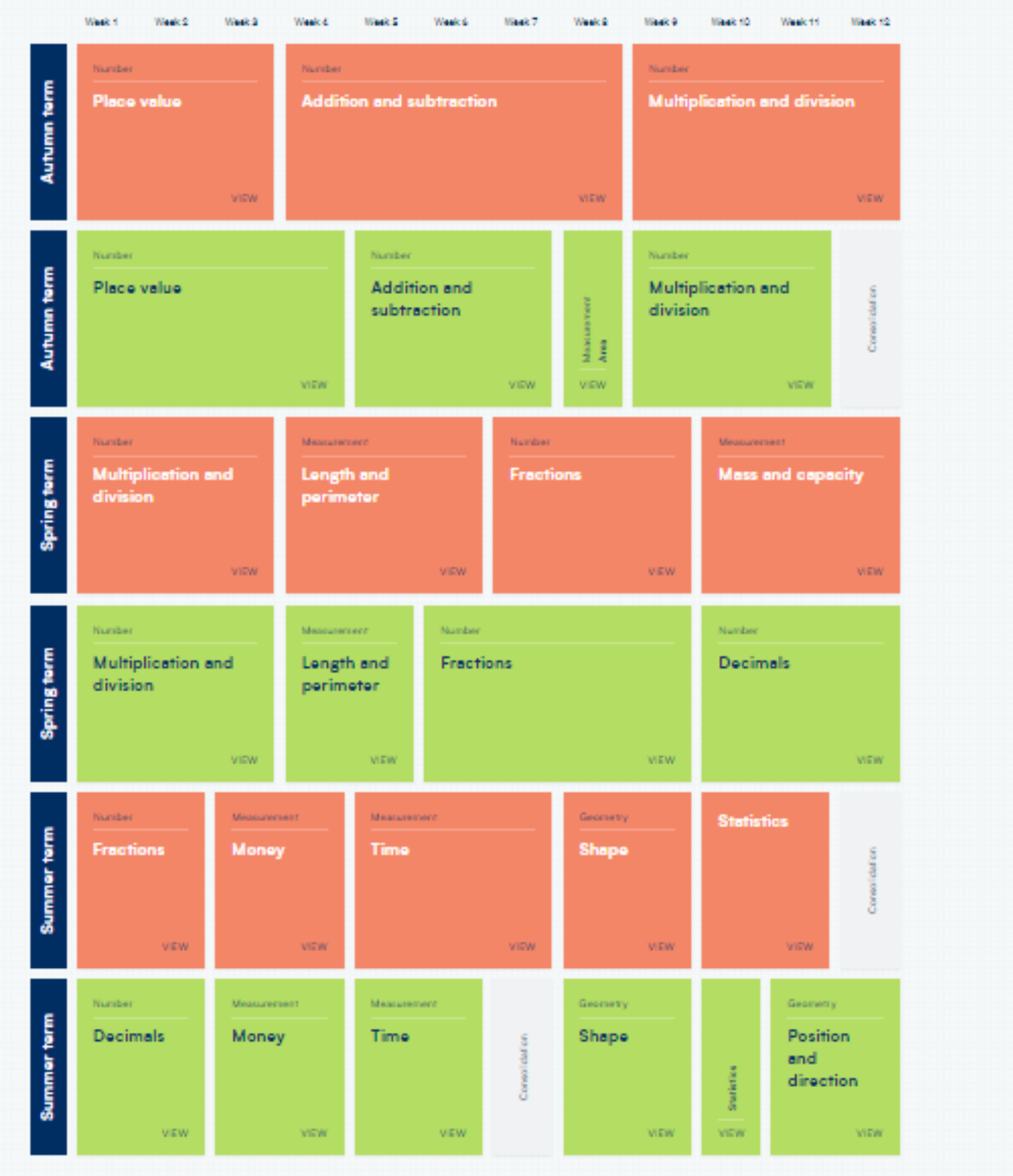
Year 1


Week 1
Week 2
Week 3
Week 4
Week 5
Week 6
Week 7
Week 8
Week 9
Week 10
Week 11
Week 12
Autumn term
Number
Place value
(within 10)
VIEW
Number
Addition and subtraction
(within 10)
VIEW
Geometry
Shape
VIEW
Consolidation
Spring term
Number
Place value
(within 20)
VIEW
Number
Addition and subtraction
(within 20)
VIEW
Number
Place value
(within 50)
VIEW
Measurement
Length and height
VIEW
Measurement
Mass and volume
VIEW
Summer term
Number
Multiplication and division
VIEW
Number
Fractions
VIEW
Geometry
Position and direction
VIEW
Number
Place value
(within 100)
VIEW
Measurement
Money
VIEW
Measurement
Time
VIEW
Consolidation

Class 2 – Year 1/2 - to be taught as two separate lessons Year 1 as Class 1, Year 2 as below

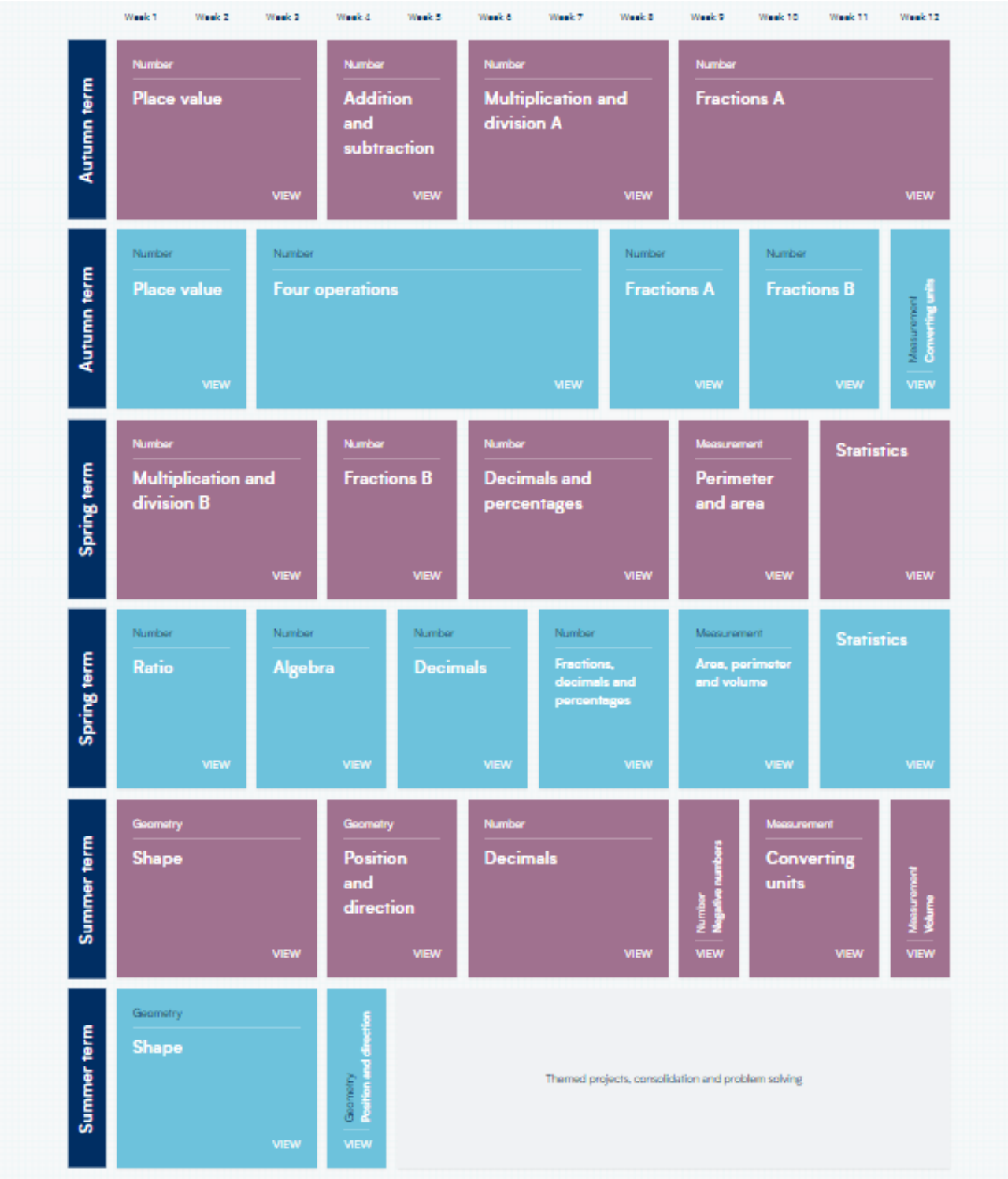


Class 3 – Year 3 & 4

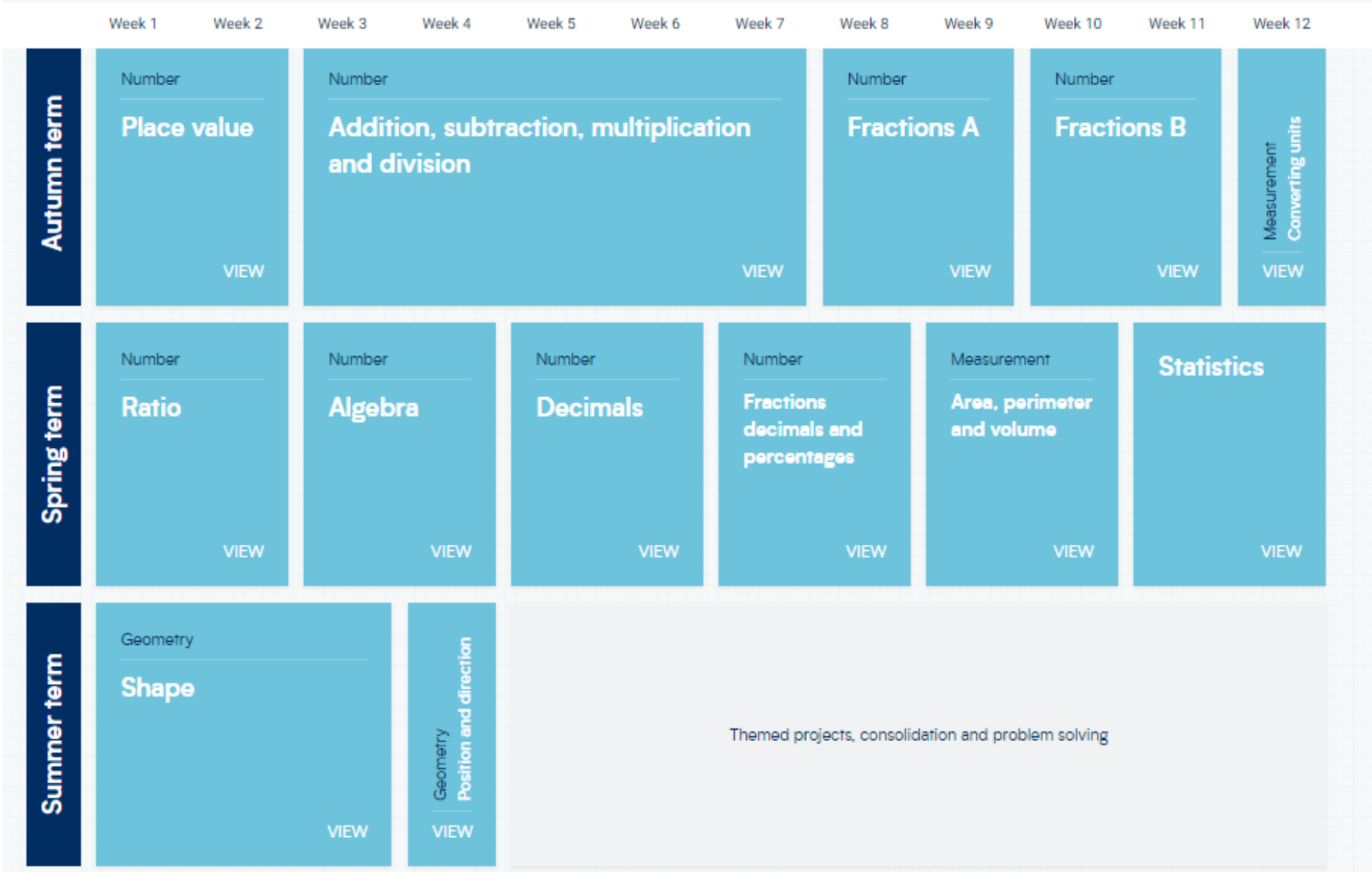


Class 4 – Year 4/5

Class 5 Year 5/6



Class 5 – Year 6 only



2.5 Small Steps Teaching Sequences by Class

Class 1	Reception Small Steps	Year 1 Small Steps
Autumn		
Reception **3 weeks Baseline** **Then 3 weeks Just Like Me** **Year 1 – PV to 10** **5 weeks**	Match 1 Match 2 Sort 1 Sort 2 Digging Deeper Match & Sort Compare amounts 1 Compare amounts 2 Compare – size, mass and capacity 1 Compare – size, mass and capacity 2 Digging Deeper Making comparisons Make simple patterns 1 Make simple patterns 2 Make simple patterns 3 Digging Deeper exploring pattern	Step 1 Sort objects Step 2 Count objects Step 3 Count objects from a larger group Step 4 Represent objects Step 5 Recognise numbers as words Step 6 Count on from any number Step 7 1 more Step 8 Count backwards within 10 Step 9 1 less Step 10 Compare groups by matching Step 11 Fewer, more, same Step 12 Less than, greater than, equal to Step 13 Compare numbers Step 14 Order objects and numbers Step 15 The number line
Reception **1 week, review consolidate and reinforce, then** **It's Me 3 weeks, Numbers to 5 3 Weeks** **Year 1 Addition and Subtraction** **5 weeks**	Representing 1,2,3 - 1 Representing 1,2,3 - 2 Comparing 1,2,3 - 1 Comparing 1,2,3 - 2 Composition of 1,2,3 - 1 Composition of 1,2,3 - 2 Digging Deeper 1,2,3 - 1 Digging Deeper 1,2,3 - 2 Circles and triangles - 1 Circles and triangles - 2 Spatial awareness – positional language 1 Spatial awareness – positional language 2 Digging Deeper - Spatial awareness – positional language 1	Step 1 Introduce parts and wholes Step 2 Part-whole model Step 3 Write number sentences Step 4 Fact families – addition facts Step 5 Number bonds within 10 Step 6 Systematic number bonds within 10 Step 7 Number bonds to 10 Step 8 Addition – add together Step 9 Addition – add more Step 10 Addition problems Step 11 Find a part Step 12 Subtraction – find a part Step 13 Fact families – the eight facts Step 14 Subtraction – take away/cross out (How many left?)

	Digging Deeper - Spatial awareness – positional language 2 Four 1 Four 2 Five 1 Five 2 Digging Deeper – numbers to 5. One more one less 1 One more one less 2 Digging Deeper - One more one less Shapes with 4 sides 1 Shapes with 4 sides 2 Digging Deeper - Shapes with 4 sides 1 Digging Deeper - Shapes with 4 sides 2 Night and Day 1 Night and Day 2 Digging Deeper – Night and Day	Step 15 Take away (How many left?) Step 16 Subtraction on a number line Step 17 Add or subtract 1 or 2
Reception **1 week, review consolidate and reinforce** **Year 1 Shape** **1 week – then 1 week consolidation**		Step 1 Recognise and name 3-D shapes Step 2 Sort 3-D shapes Step 3 Recognise and name 2-D shapes Step 4 Sort 2-D shapes Step 5 Patterns with 2-D and 3-D shapes
Spring		
Reception **Alive in 5** **3 weeks**	Introducing zero 1 Introducing zero 2 Comparing numbers to 5 1 Comparing numbers to 5 2 Composition of 4 & 5 1 Composition of 4 & 5 2 Digging Deeper – composition to 5 1	**Step 1** Count within 20 **Step 2** Understand 10 **Step 3** Understand 11, 12 and 13 **Step 4** Understand 14, 15 and 16 **Step 5** Understand 17, 18 and 19 **Step 6** Understand 20 **Step 7** 1 more and 1 less

Year 1 – PV to 20 **3 weeks**	Digging Deeper – composition to 5 2 Compare mass 1 Compare mass 2 Compare capacity 1 Compare capacity 2 Compare capacity 3 Digging Deeper – mass and capacity	**Step 8** The number line to 20 **Step 9** Use a number line to 20 **Step 10** Estimate on a number line to 20 **Step 11** Compare numbers to 20 **Step 12** Order numbers to 20
Reception **Growing 6,7,8** **Year 1 Addition and Subtraction within 20** **3 weeks**	6,7,8 1 6,7,8 2 Matching pairs 1 Matching pairs 2 Digging Deeper 6,7,8 Combining 2 groups 1 Combining 2 groups 2 Digging Deeper - Combining 2 groups Length and height 1 Length and height 2 Time 1 Time 2 Time 3 Digging Deeper – Length and Height 1 Digging Deeper – Length and Height 1	**Step 1** Add by counting on within 20 **Step 2** Add ones using number bonds **Step 3** Find and make number bonds to 20 **Step 4** Doubles **Step 5** Near doubles **Step 6** Subtract ones using number bonds **Step 7** Subtraction - counting back **Step 8** Subtraction - finding the difference **Step 9** Related facts **Step 10** Missing number problems
Reception **1 week consolidation, 1 week building 9 & 10** **Year 1 Place Value within 50** **2 weeks**	Consolidate Consolidate Consolidate Consolidate Consolidate 9 & 10 1 9 & 10 2 Comparing numbers to 10 1 Comparing numbers to 10 2 Bonds to 10 1	**Step 1** Count from 20 to 50 **Step 2** 20, 30, 40 and 50 **Step 3** Count by making groups of tens **Step 4** Groups of tens and ones **Step 5** Partition into tens and ones **Step 6** The number line to 50 **Step 7** Estimate on a number line to 50 **Step 8** 1 more, 1 less

Reception **2weeks building 9 & 10** **Year 1 Length and Height** **2 weeks**	Bonds to 10 2 Digging Deeper 9 & 10 1 Digging Deeper 9 & 10 2 3D shape 1 3D shape 2 3D shape 3 Extended patterns 1 Extended patterns 2 Digging Deeper – Extended Patterns 1 Digging Deeper – Extended Patterns 2	**Step 1** Compare lengths and heights **Step 2** Measure length using objects **Step 3** Measure length in centimetres
Reception **Bonds to 10** **Year 1 Mass and Volume** **2 weeks**	Recap bonds to 3,4,5 (and associated take aways) 1 Recap bonds to 3,4,5 (and associated take aways) 2 Recap bonds to 6,7,8 (and associated take aways) 1 Recap bonds to 6,7,8 (and associated take aways) 2 Recap bonds to 9 & 10 (and associated take aways) 1	**Step 1** Heavier and lighter **Step 2** Measure mass **Step 3** Compare mass **Step 4** Full and empty **Step 5** Compare volume **Step 6** Measure capacity **Step 7** Compare capacity
Summer		
Reception **Recap bonds 1 week, consolidate 2 weeks** **Year 1 – Multiplication & Division** **3 weeks**	Recap bonds to 9 & 10 (and associated take aways) 2 Recap all bonds 1 Recap all bonds 2 Digging Deeper Bonds to 10 1 Digging Deeper Bonds to 10 2 Review, Consolidate and Reinforce Review, Consolidate and Reinforce Review, Consolidate and Reinforce Review, Consolidate and Reinforce Review, Consolidate and Reinforce Recap – subitising Recap - composition	**Step 1** Count in 2s **Step 2** Count in 10s **Step 3** Count in 5s **Step 4** Recognise equal groups **Step 5** Add equal groups **Step 6** Make arrays **Step 7** Make doubles **Step 8** Make equal groups - grouping **Step 9** Make equal groups – sharing End of block assessment (version B)

	Recap – comparing and ordering Building numbers beyond 10 1 Building numbers beyond 10 2	
Reception **20 and beyond** **Year 1 Fractions** **2 weeks**	Counting patterns beyond 10 1 Counting patterns beyond 10 2 Digging Deeper - numbers beyond 10 Digging Deeper - capacity Spatial reasoning rotation 1 Spatial reasoning rotation 2 Spatial reasoning rotation 3 Digging Deeper Spatial reasoning rotation 1 Digging Deeper Spatial reasoning rotation 2	**Step 1** Recognise a half of an object or a shape **Step 2** Find a half of an object or a shape **Step 3** Recognise a half of a quantity **Step 4** Find a half of a quantity **Step 5** Recognise a quarter of an object or a shape **Step 6** Find a quarter of an object or a shape **Step 7** Recognise a quarter of a quantity **Step 8** Find a quarter of a quantity End of block assessment (version B)
Reception **First then now, 2 weeks, then 1 week consolidate** **Year 1 Position and direction** **1 week – Place value 2 weeks**	Adding more 1 Adding more 2 Taking away 1 Taking away 2 Taking away 3 Digging Deeper –adding and taking away Spatial reasoning shapes 1 Spatial reasoning shapes 2 Digging Deeper - spatial reasoning Review, Consolidate and Reinforce Review, Consolidate and Reinforce Review, Consolidate and Reinforce Review, Consolidate and Reinforce Review, Consolidate and Reinforce	**Step 1** Describe turns **Step 2** Describe position - left and right **Step 3** Describe position - forwards and backwards **Step 4** Describe position - above and below **Step 5** Ordinal numbers End of block assessment (version B) **Step 1** Count from 50 to 100 **Step 2** Tens to 100 **Step 3** Partition into tens and ones **Step 4** The number line to 100 **Step 5** 1 more, 1 less **Step 6** Compare numbers with the same number of tens **Step 7** Compare any two numbers End of block assessment (version B)
Reception **Find my pattern, on the move**	Doubling 1 Doubling 2 Doubling 3 Sharing and grouping 1 Sharing and grouping 2	**Step 1** Unitising **Step 2** Recognise coins **Step 3** Recognise notes **Step 4** Count in coins End of block assessment (version B)

Year 1 Measurement, money and then consolidation **4 weeks**	Sharing and grouping 3 Even and odd 1 Even and odd 2 Even and odd 3 Digging Deeper odd/even Digging Deeper find half Digging Deeper make 2 equal groups Spatial reasoning - viewpoints Spatial reasoning recreating Digging Deeper - Spatial reasoning Consolidation - subitising Consolidation - counting Consolidation - sorting Consolidation - matching Consolidation - comparing	**Step 1** Before and after **Step 2** Days of the week **Step 3** Months of the year **Step 4** Hours, minutes and seconds **Step 5** Tell the time to the hour **Step 6** Tell the time to the half hour End of block assessment (version B)

Class 2	Year 1 Small Steps	Year 2 Small Steps
Autumn		
Year 1 – PV to 10 **5 weeks** **Year 2 – PV** **4 weeks**	Step 1 Sort objects Step 2 Count objects Step 3 Count objects from a larger group Step 4 Represent objects Step 5 Recognise numbers as words Step 6 Count on from any number Step 7 1 more Step 8 Count backwards within 10 Step 9 1 less Step 10 Compare groups by matching Step 11 Fewer, more, same Step 12 Less than, greater than, equal to Step 13 Compare numbers Step 14 Order objects and numbers Step 15 The number line	Step 1 Numbers to 20 Step 2 Count objects to 100 by making 10s Step 3 Recognise tens and ones Step 4 Use a place value chart Step 5 Partition numbers to 100 Step 6 Write numbers to 100 in words Step 7 Flexibly partition numbers to 100 Step 8 Write numbers to 100 in expanded form Step 9 10s on the number line to 100 Step 10 10s and 1s on the number line to 100 Step 11 Estimate numbers on a number line Step 12 Compare objects Step 13 Compare numbers Step 14 Order objects and numbers Step 15 Count in 2s, 5s and 10s Step 16 Count in 3s

Year 1 & 2 Addition and Subtraction **5 weeks**	Step 1 Introduce parts and wholes Step 2 Part-whole model Step 3 Write number sentences Step 4 Fact families – addition facts Step 5 Number bonds within 10 Step 6 Systematic number bonds within 10 Step 7 Number bonds to 10 Step 8 Addition – add together Step 9 Addition – add more Step 10 Addition problems Step 11 Find a part Step 12 Subtraction – find a part Step 13 Fact families – the eight facts Step 14 Subtraction – take away/cross out (How many left?) Step 15 Take away (How many left?) Step 16 Subtraction on a number line Step 17 Add or subtract 1 or 2	Step 1 Bonds to 10 Step 2 Fact families – addition/subtraction bonds - 20 Step 3 Related facts Step 4 Bonds to 100 (tens) Step 5 Add and subtract 1s Step 6 Add by making 10 Step 7 Add three 1-digit numbers Step 8 Add to the next 10 Step 9 Add across a 10 Step 10 Subtract across 10 Step 11 Subtract from a 10 Step 12 Subtract a 1-digit number from a 2-digit number (across a 10) Step 13 10 more, 10 less Step 14 Add and subtract 10s Step 15 Add two 2-digit numbers (not across a 10) Step 16 Add two 2-digit numbers (across a 10) Step 17 Subtract two 2-digit numbers (not across a 10) Step 18 Subtract two 2-digit numbers (across a 10) Step 19 Mixed addition and subtraction Step 20 Compare number sentences Step 21 Missing number problems
Year 1 Shape **1 week – then 1 week consolidation** **Year 2 Shape** **3 weeks**	Step 1 Recognise and name 3-D shapes Step 2 Sort 3-D shapes Step 3 Recognise and name 2-D shapes Step 4 Sort 2-D shapes Step 5 Patterns with 2-D and 3-D shapes	Step 1 Recognise 2-D and 3-D shapes Step 2 Count sides on 2-D shapes Step 3 Count vertices on 2-D shapes Step 4 Draw 2-D shapes Step 5 Lines of symmetry on shapes Step 6 Use lines of symmetry to complete shapes Step 7 Sort 2-D shapes Step 8 Count faces on 3-D shapes Step 9 Count edges on 3-D shapes Step 10 Count vertices on 3-D shapes Step 11 Sort 3-D shapes Step 12 Make patterns with 2-D and 3-D shapes

Class 2	Year 1 Small Steps	Year 2 Small Steps
Spring		
Year 1 – PV to 20 **3 weeks** **Year 2 – Money 2 weeks, then Multiplication and Division 1 week**	**Step 1** Count within 20 **Step 2** Understand 10 **Step 3** Understand 11, 12 and 13 **Step 4** Understand 14, 15 and 16 **Step 5** Understand 17, 18 and 19 **Step 6** Understand 20 **Step 7** 1 more and 1 less **Step 8** The number line to 20 **Step 9** Use a number line to 20 **Step 10** Estimate on a number line to 20 **Step 11** Compare numbers to 20 **Step 12** Order numbers to 20	**Step 1** Count money - pence **Step 2** Count money - pounds (notes and coins) **Step 3** Count money - pounds and pence **Step 4** Choose notes and coins **Step 5** Make the same amount **Step 6** Compare amounts of money **Step 7** Calculate with money **Step 8** Make a pound **Step 9** Find change **Step 10** Two-step problems **Step 1** Recognise equal groups **Step 2** Make equal groups **Step 3** Add equal groups **Step 4** Introduce the multiplication symbol **Step 5** Multiplication sentences
Year 1 Addition and Subtraction within 20 **3 weeks** **Year 2 - Multiplication and Division 1 - 3 weeks**	**Step 1** Add by counting on within 20 **Step 2** Add ones using number bonds **Step 3** Find and make number bonds to 20 **Step 4** Doubles **Step 5** Near doubles **Step 6** Subtract ones using number bonds **Step 7** Subtraction - counting back **Step 8** Subtraction - finding the difference **Step 9** Related facts **Step 10** Missing number problems	**Step 6** Use arrays **Step 7** Make equal groups – grouping **Step 8** Make equal groups – sharing **Step 9** The 2 times-table **Step 10** Divide by 2 **Step 11** Doubling and halving **Step 12** Odd and even numbers **Step 13** The 10 times-table
Year 1 Place Value within 50 **2 weeks**	**Step 1** Count from 20 to 50 **Step 2** 20, 30, 40 and 50 **Step 3** Count by making groups of tens **Step 4** Groups of tens and ones	**Step 14** Divide by 10 **Step 15** The 5 times-table **Step 16** Divide by 5 **Step 17** The 5 and 10 times-tables

Year 2 Multiplication and Division 1 week	**Step 5** Partition into tens and ones **Step 6** The number line to 50 **Step 7** Estimate on a number line to 50 **Step 8** 1 more, 1 less	
Year 1 & 2 Length and Height **2 weeks**	**Step 1** Compare lengths and heights **Step 2** Measure length using objects **Step 3** Measure length in centimetres	**Step 1** Measure in centimetres **Step 2** Measure in metres **Step 3** Compare lengths and heights **Step 4** Order lengths and heights **Step 5** Four operations with lengths and heights
Year 1 Mass and Volume **2 weeks** **Year 2 Mass, Capacity and temperature 3 weeks**	**Step 1** Heavier and lighter **Step 2** Measure mass **Step 3** Compare mass **Step 4** Full and empty **Step 5** Compare volume **Step 6** Measure capacity **Step 7** Compare capacity	**Step 1** Compare mass **Step 2** Measure in grams **Step 3** Measure in kilograms **Step 4** Four operations with mass **Step 5** Compare volume and capacity **Step 6** Measure in millilitres **Step 7** Measure in litres **Step 8** Four operations with volume and capacity **Step 9** Temperature
Class 2	**Year 1 Small Steps**	**Year 2 Small Steps**
Summer		
Year 1 – Multiplication & Division **3 weeks** **Year 2 Fractions 3 week**	**Step 1** Count in 2s **Step 2** Count in 10s **Step 3** Count in 5s **Step 4** Recognise equal groups **Step 5** Add equal groups **Step 6** Make arrays **Step 7** Make doubles **Step 8** Make equal groups - grouping **Step 9** Make equal groups – sharing End of block assessment (version B)	**Step 1** Introduction to parts and whole **Step 2** Equal and unequal parts **Step 3** Recognise a half **Step 4** Find a half **Step 5** Recognise a quarter **Step 6** Find a quarter **Step 7** Recognise a third **Step 8** Find a third **Step 9** Find the whole **Step 10** Unit fractions **Step 11** Non-unit fractions **Step 12** Recognise the equivalence of a half and two quarters

		Step 13 Recognise three-quarters **Step 14** Find three-quarters **Step 15** Count in fractions up to a whole End of block assessment (version B)
Year 1 Fractions **2 weeks** **Year 2 Time**	**Step 1** Recognise a half of an object or a shape **Step 2** Find a half of an object or a shape **Step 3** Recognise a half of a quantity **Step 4** Find a half of a quantity **Step 5** Recognise a quarter of an object or a shape **Step 6** Find a quarter of an object or a shape **Step 7** Recognise a quarter of a quantity **Step 8** Find a quarter of a quantity End of block assessment (version B)	**Step 1** O'clock and half past **Step 2** Quarter past and quarter to **Step 3** Tell time past the hour **Step 4** Tell time to the hour **Step 5** Tell the time to 5 minutes **Step 6** Minutes in an hour **Step 7** Hours in a day End of block assessment (version B
Year 1 Position and direction **1 week – Place value 2 weeks** **Year 2 – Statistics and 2 weeks**	**Step 1** Describe turns **Step 2** Describe position - left and right **Step 3** Describe position - forwards and backwards **Step 4** Describe position - above and below **Step 5** Ordinal numbers End of block assessment (version B) **Step 1** Count from 50 to 100 **Step 2** Tens to 100 **Step 3** Partition into tens and ones **Step 4** The number line to 100 **Step 5** 1 more, 1 less **Step 6** Compare numbers with the same number of tens **Step 7** Compare any two numbers End of block assessment (version B)	**Step 1** Make tally charts **Step 2** Tables **Step 3** Block diagrams **Step 4** Draw pictograms (1-1) **Step 5** Interpret pictograms (1-1) **Step 6** Draw pictograms (2, 5 and 10) **Step 7** Interpret pictograms (2, 5 and 10) End of block assessment (version B)

Year 1 Measurement, money and then consolidation **4 weeks** **Year 2 –. Position and Direction**	**Step 1** Unitising **Step 2** Recognise coins **Step 3** Recognise notes **Step 4** Count in coins End of block assessment (version B) **Step 1** Before and after **Step 2** Days of the week **Step 3** Months of the year **Step 4** Hours, minutes and seconds **Step 5** Tell the time to the hour **Step 6** Tell the time to the half hour End of block assessment (version B)	**Step 1** Language of position **Step 2** Describe movement **Step 3** Describe turns **Step 4** Describe movement and turns **Step 5** Shape patterns with turns End of block assessmnet (version

Class 3	Year 3 Small Steps	Year 4 Small Steps
Autumn		
Year 3 – PV **3 weeks** **Year 4 – PV** **4 weeks**	Step 1 Represent numbers to 100 Step 2 Partition numbers to 100 Step 3 Number line to 100 Step 4 Hundreds Step 5 Represent numbers to 1,000 Step 6 Partition numbers to 1,000 Step 7 Flexible partitioning of numbers to 1,000 Step 8 Hundreds, tens and ones Step 9 Find 1, 10 or 100 more or less Step 10 Number line to 1,000 Step 11 Estimate on a number line to 1,000 Step 12 Compare numbers to 1,000 Step 13 Order numbers to 1,000 Step 14 Count in 50s	Step 1 Represent numbers to 1,000 Step 2 Partition numbers to 1,000 Step 3 Number line to 1,000 Step 4 Thousands Step 5 Represent numbers to 10,000 Step 6 Partition numbers to 10,000 Step 7 Flexible partitioning of numbers to 10,000 Step 8 Find 1, 10, 100, 1,000 more or less Step 9 Number line to 10,000 Step 10 Estimate on a number line to 10,000 Step 11 Compare numbers to 10,000 Step 12 Order numbers to 10,000 Step 13 Roman numerals Step 14 Round to the nearest 10 Step 15 Round to the nearest 100 Step 16 Round to the nearest 1,000 Step 17 Round to the nearest 10, 100 or 1,000

Year 3 & 4 Addition and Subtraction 5 weeks Y3 3 weeks Y4 **Year 4 - Measurement Area 1 week**	Step 1 Apply number bonds within 10 Step 2 Add and subtract 1s Step 3 Add and subtract 10s Step 4 Add and subtract 100s Step 5 Spot the pattern Step 6 Add 1s across a 10 Step 7 Add 10s across a 100 Step 8 Subtract 1s across a 10 Step 9 Subtract 10s across a 100 Step 10 Make connections Step 11 Add two numbers (no exchange) Step 12 Subtract two numbers (no exchange) Step 13 Add two numbers (across a 10) Step 14 Add two numbers (across a 100) Step 15 Subtract two numbers (across a 10) Step 16 Subtract two numbers (across a 100) Step 17 Add 2-digit and 3-digit numbers Step 18 Subtract a 2-digit number from a 3-digit number Step 19 Complements to 100 Step 20 Estimate answers Step 21 Inverse operations Step 22 Make decisions	Step 1 Add and subtract 1s, 10s, 100s and 1,000s Step 2 Add up to two 4-digit numbers - no exchange Step 3 Add two 4-digit numbers - one exchange Step 4 Add two 4-digit numbers - more than one exchange Step 5 Subtract two 4-digit numbers - no exchange Step 6 Subtract two 4-digit numbers - one exchange Step 7 Subtract two 4-digit numbers - more than one exchange Step 8 Efficient subtraction Step 9 Estimate answers Step 10 Checking strategies Step 1 What is area? Step 2 Count squares Step 3 Make shapes
Year3 Multiplication & Division **4 weeks – then 1 week consolidation**	Step 1 Multiplication - equal groups Step 2 Use arrays Step 3 Multiples of 2 Step 4 Multiples of 5 and 10 Step 5 Sharing and grouping Step 6 Multiply by 3 Step 7 Divide by 3 Step 8 The 3 times-table Step 9 Multiply by 4	Step 1 Multiples of 3 Step 2 Multiply and divide by 6 Step 3 6 times-table and division facts Step 4 Multiply and divide by 9 Step 5 9 times-table and division facts Step 6 The 3, 6 and 9 times-tables Step 7 Multiply and divide by 7 Step 8 7 times-table and division facts Step 9 11 times-table and division facts

Year 4 Multiplication & Division **3 weeks – then 1 week consolidation**	Step 10 Divide by 4 Step 11 The 4 times-table Step 12 Multiply by 8 Step 13 Divide by 8 Step 14 The 8 times-table Step 15 The 2, 4 and 8 times-tables	Step 10 12 times-table and division facts Step 11 Multiply by 1 and 0 Step 12 Divide a number by 1 and itself Step 13 Multiply three numbers
Spring		
Year 3 – Multiplication and Division **3 weeks** **Year 4 – Multiplication and Division** **3 weeks**	**Step 1** Multiples of 10 **Step 2** Related calculations **Step 3** Reasoning about multiplication **Step 4** Multiply a 2-digit number by a 1-digit number - no exchange **Step 5** Multiply a 2-digit number by a 1-digit number - with exchange **Step 6** Link multiplication and division **Step 7** Divide a 2-digit number by a 1-digit number - no exchange **Step 8** Divide a 2-digit number by a 1-digit number - flexible partitioning **Step 9** Divide a 2-digit number by a 1-digit number - with remainders **Step 10** Scaling **Step 11** How many ways?	**Step 1** Factor pairs **Step 2** Use factor pairs **Step 3** Multiply by 10 **Step 4** Multiply by 100 **Step 5** Divide by 10 **Step 6** Divide by 100 **Step 7** Related facts – multiplication and division **Step 8** Informal written methods for multiplication **Step 9** Multiply a 2-digit number by a 1-digit number **Step 10** Multiply a 3-digit number by a 1-digit number **Step 11** Divide a 2-digit number by a 1-digit number (1) **Step 12** Divide a 2-digit number by a 1-digit number (2) **Step 13** Divide a 3-digit number by a 1-digit number **Step 14** Correspondence problems **Step 15** Efficient multiplication
Year 3 & 4 Length and perimeter 3 weeks Y3 2 weeks Y4 **Year 4 - Length and perimeter**	**Step 1** Measure in metres and centimetres **Step 2** Measure in millimetres **Step 3** Measure in centimetres and millimetres **Step 4** Metres, centimetres and millimetres **Step 5** Equivalent lengths (metres and centimetres) **Step 6** Equivalent lengths (centimetres and millimetres)	**Step 1** Measure in kilometres and metres **Step 2** Equivalent lengths (kilometres and metres) **Step 3** Perimeter on a grid **Step 4** Perimeter of a rectangle **Step 5** Perimeter of rectilinear shapes **Step 6** Find missing lengths in rectilinear shapes **Step 7** Calculate the perimeter of rectilinear shapes **Step 8** Perimeter of regular polygons **Step 9** Perimeter of polygons

	Step 7 Compare lengths **Step 8** Add lengths **Step 9** Subtract lengths **Step 10** What is perimeter? **Step 11** Measure perimeter **Step 12** Calculate perimeter	
Year3 Fractions **3 weeks** **Year 4 Fractions 4 weeks**	**Step 1** Understand the denominators of unit fractions **Step 2** Compare and order unit fractions **Step 3** Understand the numerator of non-unit fractions **Step 4** Understand the whole **Step 5** Compare and order non-unit fractions **Step 6** Fractions and scales **Step 7** Fractions on a number line **Step 8** Count in fractions on a number line **Step 9** Equivalent fractions on a number line **Step 10** Equivalent fractions as bar models	**Step 1** Understand the whole **Step 2** Count beyond 1 **Step 3** Partition a mixed number **Step 4** Number lines with mixed numbers **Step 5** Compare and order mixed numbers **Step 6** Understand improper fractions **Step 7** Convert mixed numbers to improper fractions **Step 8** Convert improper fractions to mixed numbers **Step 9** Equivalent fractions on a number line **Step 10** Equivalent fraction families **Step 11** Add two or more fractions **Step 12** Add fractions and mixed numbers **Step 13** Subtract two fractions **Step 14** Subtract from whole amounts **Step 15** Subtract from mixed numbers
Year3 Mass and Capacity 3 weeks **Year 4 decimals 3 weeks**	**Step 1** Use scales **Step 2** Measure mass in grams **Step 3** Measure mass in kilograms and grams **Step 4** Equivalent masses (kilograms and grams) **Step 5** Compare mass **Step 6** Add and subtract mass **Step 7** Measure capacity and volume in millilitres	**Step 1** Tenths as fractions **Step 2** Tenths as decimals **Step 3** Tenths on a place value chart **Step 4** Tenths on a number line **Step 5** Divide a 1-digit number by 10 **Step 6** Divide a 2-digit number by 10 **Step 7** Hundredths as fractions **Step 8** Hundredths as decimals **Step 9** Hundredths on a place value chart **Step 10** Divide a 1- or 2-digit number by 100

	Step 8 Measure capacity and volume in litres and millilitres **Step 9** Equivalent capacities and volumes (litres and millilitres) **Step 10** Compare capacity and volume **Step 11** Add and subtract capacity and volume	
Summer		
Year 3 – Fractions **2 weeks** **Year 4 – Decimals** **2 weeks**	**Step 1** Add fractions **Step 2** Subtract fractions **Step 3** Partition the whole **Step 4** Unit fractions of a set of objects **Step 5** Non-unit fractions of a set of objects **Step 6** Reasoning with fractions of an amount End of block assessment (version B)	**Step 1** Make a whole with tenths **Step 2** Make a whole with hundredths **Step 3** Partition decimals **Step 4** Flexibly partition decimals **Step 5** Compare decimals **Step 6** Order decimals **Step 7** Round to the nearest whole number **Step 8** Halves and quarters as decimals End of block assessment (version B)
Year 3 & 4 Money **2 weeks**	**Step 1** Pounds and pence **Step 2** Convert pounds and pence **Step 3** Add money **Step 4** Subtract money **Step 5** Find change End of block assessment (version B)	**Step 1** Write money using decimals **Step 2** Convert between pounds and pence **Step 3** Compare amounts of money **Step 4** Estimate with money **Step 5** Calculate with money **Step 6** Solve problems with money End of block assessment (version B)
Year3 Time **3 weeks** **Year 4 Time** **2 week – then 1 week consolidation**	**Step 1** Roman numerals to 12 **Step 2** Tell the time to 5 minutes **Step 3** Tell the time to the minute **Step 4** Read time on a digital clock **Step 5** Use a.m. and p.m. **Step 6** Years, months and days **Step 7** Days and hours **Step 8** Hours and minutes - use start and end times **Step 9** Hours and minutes - use durations	**Step 1** Years, months, weeks and days **Step 2** Hours, minutes and seconds **Step 3** Convert between analogue and digital times **Step 4** Convert to the 24 hour clock **Step 5** Convert from the 24 hour clock End of block assessment (version B)

	Step 10 Minutes and seconds **Step 11** Units of time **Step 12** Solve problems with time End of block assessment (version B)	
Year 3 & 4 Shape **2 weeks**	**Step 1** Turns and angles **Step 2** Right angles **Step 3** Compare angles **Step 4** Measure and draw accurately **Step 5** Horizontal and vertical **Step 6** Parallel and perpendicular **Step 7** Recognise and describe 2-D shapes **Step 8** Draw polygons **Step 9** Recognise and describe 3-D shapes **Step 10** Make 3-D shapes End of block assessment (version B	**Step 1** Understand angles as turns **Step 2** Identify angles **Step 3** Compare and order angles **Step 4** Triangles **Step 5** Quadrilaterals **Step 6** Polygons **Step 7** Lines of symmetry **Step 8** Complete a symmetric figure End of block assessment (version B)
Year3 Statistics 2 weeks then 1 week consolidation **Year 4 Statistics** **1 week – then 2 weeks position and direction**	**Step 1** Interpret pictograms **Step 2** Draw pictograms **Step 3** Interpret bar charts **Step 4** Draw bar charts **Step 5** Collect and represent data **Step 6** Two-way tables End of block assessment (version B)	**Step 1** Interpret charts **Step 2** Comparison, sum and difference **Step 3** Interpret line graphs **Step 4** Draw line graphs End of block assessment (version B) Then **Step 1** Describe position using coordinates **Step 2** Plot coordinates **Step 3** Draw 2-D shapes on a grid **Step 4** Translate on a grid **Step 5** Describe translation on a grid End of block assessment (version B)

Class 4	Year 4 Small Steps	Year 5 Small Steps
Autumn		
Year 4 & 5 PV **3 weeks**	Year 4 - Roman numerals Year 4 - 1,000,100s,10s and 1s Year 4 - partitioning	Year 5 - Roman numerals Year 5 - Numbers to 10,000 Year 5 - Numbers to 100,000

	Year 4 - Number line to 10,000 Year 4 - Count in 1,000s Year 4 - 1,000 more or less Year 4 - Count in 25s Year 4 - Compare 4-digit numbers Year 4 - Order numbers Year 4 - Round to the nearest 10 Year 4 - Round to the nearest 100 Year 4 - Round to the nearest 1,000 Year 4 – Negative numbers	Year 5 - Numbers to one million Year 5 - Counting in powers of 10 Year 5 - Compare and order Year 5 - Round to 10, 100, and 1,000 Year 5 - Round within 100,000 Year 5 - Round within a million Year 5 - Negative numbers
Year 4 & 5 **Addition and Subtraction** **3 weeks**	Year 4 - 1s,10s,100,1,000s Year 4 - Add two 4-digit numbers (1) Year 4 - Add two 4-digit numbers (2) Year 4 - Add two 4-digit numbers (3) Year 4 - Subtract two 4-digit numbers (1) Year 4 - Subtract two 4-digit numbers (2) Year 4 - Subtraction two 4-digit (3) Year 4 - Efficient subtraction Year 4 - Estimate answers Year 4 - Checking strategies	Year 5 - Add more than 4-digit Year 5 - Subtraction more than 4-digit Year 5 - Estimate and approximate Year 5 - Inverse operations Year 5 - Multi-step problems
Year 4 & 5 **Length, perimeter and area** **2 weeks**	Year 4 - Kilometres Year 4 - Perimeter on a grid Year 4 - Perimeter of a rectangle Year 4 - Perimeter of rectilinear shapes Year 4 - What is area? Year 4 - Counting squares Year 4 - Making shapes Year 4 - Comparing area	Year 5 - Measure perimeter Year 5 - Calculate perimeter Year 5 - Area of rectangles Year 5 - Area of compound shapes Year 5 - Area of irregular shapes
Class 4	**Year 4 Small Steps**	**Year 5 Small Steps**
Spring		
Year 4 & 5 **Multiplication and Division** **3 weeks**	Year 4 - Efficient multiplication Year 4 - Written methods Year 4 - Multiply 2-digits by 1-digit Year 4 - Multiply 3-digit by 1-digit Year 4 - Divide 2-digit by 1-digit (1) Year 4 - Divide 2-digit by 1-digit (2)	Year 5 - Multiply 4-digit by 1-digit Year 5 - Multiply 2-digit (area model)(PART 1) Year 5 - Multiply 2-digit (area model)(PART 2) Year 5 - Multiply 2-digit by 2-digit Year 5 - Multiply 3-digit by 2-digits Year 5 - Multiply 3-digit by 2-digits

	Year 4 - Divide 3-digit by 1-digit Year 4 - Correspondence problems	Year 5 - Multiply 4-digit by 2-digit Year 5 - Divide 4-divide by 1-digit Year 5 - Divide with remainders
Year 4 & 5 Fractions **5 weeks**	Year 4 - What is a fraction? Year 4 - Equivalent fractions (1) Year 4 - Equivalent fractions (2) Year 4 - Fractions greater than 1 Year 4 - Count in fractions Year 4 - Add 2 or more fractions Year 4 - Subtract 2 fractions Year 4 - Subtract from whole amounts Year 4 - Fractions of a quantity Year 4 - Calculate quantities	Year 5 - Equivalent fractions Year 5 - Improper to mixed numbers Year 5 - Mixed numbers to improper Year 5 - Number sequences Year 5 - Compare & order (less than 1)(PART 1) Year 5 - Compare & order (less than 1)(PART 2) Year 5 - Add & subtract fractions Year 5 - Add fractions within 1 Year 5 - Add 3 or more fractions Year 5 - Add fractions Year 5 - Add mixed numbers Year 5 - Subtract fractions Year 5 - Subtract mixed numbers (1) Year 5 - Subtract mixed numbers (2) Year 5 - Subtract 2 mixed numbers Year 5 - Multiply by an integer (1) Year 5 - Multiply by an integer (2) Year 5 - Multiply by an integer (3) Year 5 - Fractions of an amount Year 5 - Fractions as operators
Year 4 – Decimals **Year 5 Percentages** **4 weeks**	Year 4 - Tenths & hundredths Year 4 - Tenths as decimals Year 4 - Tenths on a place value grid Year 4 - Tenths on a number line Year 4 - Hundredths Year 4 - Hundredths as decimals Year 4 - Hundredths on a place value grid Year 4 - Write decimals Year 4 - Halves and quarters Year 4 - Divide 1-digit by 10 Year 4 - Divide 2-digit by 10 Year 4 - Divide 1 or 2-digit by 100	Year 5 - Decimals up to 2 d.p. Year 5 - Decimals as fractions (1) Year 5 - Decimals as fractions (2) Year 5 - Understand percentages Year 5 - Percentages as fractions & decimals Year 5 - Equivalent F.D.P. Year 5 - Understand thousandths Year 5 - Thousandths as decimals Year 5 - Multiply by 10, 100 and 1000 Year 5 - Divide by 10,100 and 1000 Year 5 - Adding decimals within 1 Year 5 - Subtracting decimals within Year 5 - Complements to 1

	Year 4 - Make a whole	
Summer		
Year 4 Decimals **2 weeks** **Year 5 Money** **2 weeks**	Year 4 - Pounds and pence Year 4 - Compare decimals Year 4 - Order decimals Year 4 - Ordering money Year 4 - Round decimals Year 4 - Estimating money Year 4 - Four operations	Year 5 - Order & compare decimals Year 5 - Rounding decimals Year 5 - Adding - same decimal places Year 5 - Subtract - same decimal places Year 5 - Adding - different D.P Year 5 - Subtracting - different D.P. Year 5 - Wholes and decimals Year 5 - Decimal sequences
Year 4 & 5 **Time** **1 week**	Year 4 - Hours, minutes & seconds Year 4 - Years, months, weeks & days Year 4 - Analogue to digital - 12 hour Year 4 - Analogue to digital - 24 hour	Year 5 - Converting units of time Year 5 - Timetables
Year 4 & 5 **Statistics** **2 weeks**	Year 4 - Introducing line graphs Year 4 - Line graphs	Year 5 - Read & interpret line graphs Year 5 - Draw line graphs Year 5 - Problems with line graphs Year 5 - Read & interpret tables Year 5 - Two-way tables
Year 4 & 5 **Shape** **3 weeks**	Year 4 - Identify angles Year 4 - Compare & order angles Year 4 - Triangles Year 4 - Quadrilaterals Year 4 - Lines of symmetry Year 4 - Symmetric figures	Year 5 - Measuring angles in degrees Year 5 - Measuring with a protractor (1) Year 5 - Measuring with a protractor (2) Year 5 - Drawing accurately Year 5 - Angles on a straight line Year 5 - Angles around a point Year 5 - Lengths and angles in shapes Year 5 - Regular & irregular polygons Year 5 - Reasoning about 3-D shapes
Year 4 & 5 **Position & direction** **1 week**	Year 4 - Describe position Year 4 - Draw on a grid Year 4 - Move on a grid Year 4 - Describe movement	Year 5 - Position in the 1st quadrant Year 5 - Translation Year 5 - Translation with coordinates Year 5 - Reflection Year 5 - Reflection with coordinates

Year 4 Consolidation 3 weeks **Year 5 Converting units and volume - 2 weeks.** **Consolidation 1 week**	Consolidation	Year 5 - Kilograms and Kilometres Year 5 - Miligrams and Milimitres Year 5 - Metric Units Year 5 - Imperial Units Year 5 - What is Volume? Year 5 - Compare Volume Year 5 - Estimate Volume Year 5 - Estimate Capacity

Class 5 – Year 6 Only	Year 6 Small Steps
Autumn	
Year 6 PV **2 weeks**	Step 1 Numbers to 1,000,000 Step 2 Numbers to 10,000,000 Step 3 Read and write numbers to 10,000,000 Step 4 Powers of 10 Step 5 Number line to 10,000,000 Step 6 Compare and order any integers Step 7 Round any integer Step 8 Negative numbers
Year 6 4 operations **5weeks**	Step 1 Add and subtract integers Step 2 Common factors Step 3 Common multiples Step 4 Rules of divisibility Step 5 Primes to 100 Step 6 Square and cube numbers Step 7 Multiply up to a 4-digit number by a 2-digit number Step 8 Solve problems with multiplication Step 9 Short division Step 10 Division using factors Step 11 Introduction to long division Step 12 Long division with remainders Step 13 Solve problems with division

	Step 14 Solve multi-step problems Step 15 Order of operations Step 16 Mental calculations and estimation Step 17 Reason from known facts
Year 6 **Fractions A** **2 weeks**	Step 1 Equivalent fractions and simplifying Step 2 Equivalent fractions on a number line Step 3 Compare and order (denominator) Step 4 Compare and order (numerator) Step 5 Add and subtract simple fractions Step 6 Add and subtract any two fractions Step 7 Add mixed numbers Step 8 Subtract mixed numbers Step 9 Multi-step problems
Year 6 **Fractions A** **2 weeks**	Step 1 Multiply fractions by integers Step 2 Multiply fractions by fractions Step 3 Divide a fraction by an integer Step 4 Divide any fraction by an integer Step 5 Mixed questions with fractions Step 6 Fraction of an amount Step 7 Fraction of an amount – find the whole
Year 6 Measurement **1 week**	Step 1 Metric measures Step 2 Convert metric measures Step 3 Calculate with metric measures Step 4 Miles and kilometres Step 5 Imperial measures
Spring	
Year 6 Ratio **2 weeks**	**Step 1** Add or multiply? **Step 2** Use ratio language **Step 3** Introduction to the ratio symbol **Step 4** Ratio and fractions **Step 5** Scale drawing **Step 6** Use scale factors **Step 7** Similar shapes **Step 8** Ratio problems **Step 9** Proportion problems **Step 10** Recipes

Year 6 Algebra **2 weeks**	**Step 1** 1-step function machines **Step 2** 2-step function machines **Step 3** Form expressions **Step 4** Substitution **Step 5** Formulae **Step 6** Form equations **Step 7** Solve 1-step equations **Step 8** Solve 2-step equations **Step 9** Find pairs of values **Step 10** Solve problems with two unknowns
Year 6 Decimals **2 weeks**	**Step 1** Place value within 1 **Step 2** Place value – integers and decimals **Step 3** Round decimals **Step 4** Add and subtract decimals **Step 5** Multiply by 10, 100 and 1,000 **Step 6** Divide by 10, 100 and 1,000 **Step 7** Multiply decimals by integers **Step 8** Divide decimals by integers **Step 9** Multiply and divide decimals in context
Year 6 **Fractions, decimals, percentages** **2 weeks**	**Step 1** Decimal and fraction equivalents **Step 2** Fractions as division **Step 3** Understand percentages **Step 4** Fractions to percentages **Step 5** Equivalent fractions, decimals and percentages **Step 6** Order fractions, decimals and percentages **Step 7** Percentage of an amount – one step **Step 8** Percentage of an amount – multi-step **Step 9** Percentages – missing values
Year 6 Area, perimeter and volume	**Step 1** Shapes - same area **Step 2** Area and perimeter **Step 3** Area of a triangle – counting squares

2 week	**Step 4** Area of a right-angled triangle **Step 5** Area of any triangle **Step 6** Area of a parallelogram **Step 7** Volume - counting cubes **Step 8** Volume of a cuboid
Year 6 Statistics **2 week**	**Step 1** Line graphs **Step 2** Dual bar charts **Step 3** Read and interpret pie charts **Step 4** Pie charts with percentages **Step 5** Draw pie charts **Step 6** The mean

Summer	
Year 6 Shape **3 weeks**	**Step 1** Measure and classify angles **Step 2** Calculate angles **Step 3** Vertically opposite angles **Step 4** Angles in a triangle **Step 5** Angles in a triangle – special cases **Step 6** Angles in a triangle – missing angles **Step 7** Angles in quadrilaterals **Step 8** Angles in polygons **Step 9** Circles **Step 10** Draw shapes accurately **Step 11** Nets of 3-D shapes End of block assessment (version B)
Year 6 Position and direction 1 week	**Step 1** The first quadrant **Step 2** Read and plot points in four quadrants **Step 3** Solve problems with coordinates **Step 4** Translations **Step 5** Reflections End of block assessmnet (version B)

Year 6 Themed projects, consolidation and problem solving **8 weeks**	**White Rose Bakery** Activity 1 - Resources Best value Activity 2 - Resources Profit & loss Packaging Cooking problems Activity 6 - Resources **White Rose Tours** Climate worksheet Activity 1 - Resources Distance conversion graph Conversion Airport Activity 2 – Resources Accommodation Activity 3 - Resources Budget Activity 4 - Resources Time problem **White Rose Futures** Annual salary Hourly rates Activity 1 - Resources Bills Activity 2 - Resources Mortgage Activity 3 – Resources House Activity 4 - Resources

When Class 5 is a mixed Year 5 & 6 class the curriculum is as shown overleaf.

Class 5	Year 5 Small Steps	Year 6 Small Steps
Autumn		
Year 5 – PV 3 weeks **Year 6 PV 2 weeks**	**Step 1** Roman numerals to 1,000 **Step 2** Numbers to 10,000 **Step 3** Numbers to 100,000 **Step 4** Numbers to 1,000,000 **Step 5** Read and write numbers to 1,000,000 **Step 6** Powers of 10 **Step 7** 10/100/1,000/10,000/100,000 more or less **Step 8** Partition numbers to 1,000,000 **Step 9** Number line to 1,000,000 **Step 10** Compare and order numbers to 100,000 **Step 11** Compare and order numbers to 1,000,000 **Step 12** Round to the nearest 10, 100 or 1,000 **Step 13** Round within 100,000 **Step 14** Round within 1,000,000 End of block assessment (version B)	Step 1 Numbers to 1,000,000 Step 2 Numbers to 10,000,000 Step 3 Read and write numbers to 10,000,000 Step 4 Powers of 10 Step 5 Number line to 10,000,000 Step 6 Compare and order any integers Step 7 Round any integer Step 8 Negative numbers
Year 5 – Addition & Subtraction 2 weeks **Multiplication & Division** **3 weeks** **Year 6 4 operations** **5 weeks**	**Step 1** Mental strategies **Step 2** Add whole numbers with more than four digits **Step 3** Subtract whole numbers with more than four digits **Step 4** Round to check answers **Step 5** Inverse operations (addition and subtraction) **Step 6** Multi-step addition and subtraction problems **Step 7** Compare calculations **Step 8** Find missing numbers End of block assessment (version B Then **Step 1** Multiples **Step 2** Common multiples	Step 1 Add and subtract integers Step 2 Common factors Step 3 Common multiples Step 4 Rules of divisibility Step 5 Primes to 100 Step 6 Square and cube numbers Step 7 Multiply up to a 4-digit number by a 2-digit number Step 8 Solve problems with multiplication Step 9 Short division Step 10 Division using factors Step 11 Introduction to long division Step 12 Long division with remainders Step 13 Solve problems with division Step 14 Solve multi-step problems Step 15 Order of operations

	Step 3 Factors **Step 4** Common factors **Step 5** Prime numbers **Step 6** Square numbers **Step 7** Cube numbers **Step 8** Multiply by 10, 100 and 1,000 **Step 9** Divide by 10, 100 and 1,000 **Step 10** Multiples of 10, 100 and 1,000 End of block assessment (version B)	Step 16 Mental calculations and estimation Step 17 Reason from known facts
Year 5 – Fractions 4 weeks **Year 6 Fractions A** **2 weeks** **Year 6 Fractions B** **2 weeks**	**Step 1** Find fractions equivalent to a unit fraction **Step 2** Find fractions equivalent to a non-unit fraction **Step 3** Recognise equivalent fractions **Step 4** Convert improper fractions to mixed numbers **Step 5** Convert mixed numbers to improper fractions **Step 6** Compare fractions less than 1 **Step 7** Order fractions less than 1 **Step 8** Compare and order fractions greater than 1 **Step 9** Add and subtract fractions with the same denominator **Step 10** Add fractions within 1 **Step 11** Add fractions with total greater than 1 **Step 12** Add to a mixed number **Step 13** Add two mixed numbers **Step 14** Subtract fractions **Step 15** Subtract from a mixed number **Step 16** Subtract from a mixed number - breaking the whole **Step 17** Subtract two mixed numbers End of block assessment (version B)	Step 1 Equivalent fractions and simplifying Step 2 Equivalent fractions on a number line Step 3 Compare and order (denominator) Step 4 Compare and order (numerator) Step 5 Add and subtract simple fractions Step 6 Add and subtract any two fractions Step 7 Add mixed numbers Step 8 Subtract mixed numbers Step 9 Multi-step problems Step 1 Multiply fractions by integers Step 2 Multiply fractions by fractions Step 3 Divide a fraction by an integer Step 4 Divide any fraction by an integer Step 5 Mixed questions with fractions Step 6 Fraction of an amount Step 7 Fraction of an amount – find the whole

Year 6 Measurement **1 week**	Complete above.	Step 1 Metric measures Step 2 Convert metric measures Step 3 Calculate with metric measures Step 4 Miles and kilometres Step 5 Imperial measures
Spring		
Year 5 Multiplication & Division 3 weeks **Year 6 Ratio 2 weeks**	**Step 1** Multiply up to a 4-digit number by a 1-digit number **Step 2** Multiply a 2-digit number by a 2-digit number (area model) **Step 3** Multiply a 2-digit number by a 2-digit number **Step 4** Multiply a 3-digit number by a 2-digit number **Step 5** Multiply a 4-digit number by a 2-digit number **Step 6** Solve problems with multiplication **Step 7** Short division **Step 8** Divide a 4-digit number by a 1-digit number **Step 9** Divide with remainders **Step 10** Efficient division **Step 11** Solve problems with multiplication and division End of block assessment (version B)	**Step 1** Add or multiply? **Step 2** Use ratio language **Step 3** Introduction to the ratio symbol **Step 4** Ratio and fractions **Step 5** Scale drawing **Step 6** Use scale factors **Step 7** Similar shapes **Step 8** Ratio problems **Step 9** Proportion problems **Step 10** Recipes
Year 5 Fractions – 2 weeks **Year 6 Algebra** **2 weeks**	**Step 1** Multiply a unit fraction by an integer **Step 2** Multiply a non-unit fraction by an integer **Step 3** Multiply a mixed number by an integer **Step 4** Calculate a fraction of a quantity **Step 5** Fraction of an amount **Step 6** Find the whole **Step 7** Use fractions as operators End of block assessment (version B)	**Step 1** 1-step function machines **Step 2** 2-step function machines **Step 3** Form expressions **Step 4** Substitution **Step 5** Formulae **Step 6** Form equations **Step 7** Solve 1-step equations **Step 8** Solve 2-step equations **Step 9** Find pairs of values **Step 10** Solve problems with two unknowns

Year 5 Decimals & Percentages 3 weeks **Year 6 Decimals** **2 weeks**	**Step 1** Decimals up to 2 decimal places **Step 2** Equivalent fractions and decimals (tenths) **Step 3** Equivalent fractions and decimals (hundredths) **Step 4** Equivalent fractions and decimals **Step 5** Thousandths as fractions **Step 6** Thousandths as decimals **Step 7** Thousandths on a place value chart **Step 8** Order and compare decimals (same number of decimal places) **Step 9** Order and compare any decimals with up to 3 decimal places **Step 10** Round to the nearest whole number **Step 11** Round to 1 decimal place **Step 12** Understand percentages **Step 13** Percentages as fractions **Step 14** Percentages as decimals **Step 15** Equivalent fractions, decimals and percentages End of block assessment (version B)	**Step 1** Place value within 1 **Step 2** Place value – integers and decimals **Step 3** Round decimals **Step 4** Add and subtract decimals **Step 5** Multiply by 10, 100 and 1,000 **Step 6** Divide by 10, 100 and 1,000 **Step 7** Multiply decimals by integers **Step 8** Divide decimals by integers **Step 9** Multiply and divide decimals in context
Year 5 Perimeter & area 2 weeks **Year 6 Fractions, decimals, percentages** **2 weeks**	**Step 1** Perimeter of rectangles **Step 2** Perimeter of rectilinear shapes **Step 3** Perimeter of polygons **Step 4** Area of rectangles **Step 5** Area of compound shapes **Step 6** Estimate area End of block assessment (version B)	**Step 1** Decimal and fraction equivalents **Step 2** Fractions as division **Step 3** Understand percentages **Step 4** Fractions to percentages **Step 5** Equivalent fractions, decimals and percentages **Step 6** Order fractions, decimals and percentages **Step 7** Percentage of an amount – one step **Step 8** Percentage of an amount – multi-step **Step 9** Percentages – missing values
Year 6 Shape 2 weeks		**Step 1** Shapes - same area **Step 2** Area and perimeter

Year 6 Area, perimeter and volume **2 week**		**Step 3** Area of a triangle – counting squares **Step 4** Area of a right-angled triangle **Step 5** Area of any triangle **Step 6** Area of a parallelogram **Step 7** Volume - counting cubes **Step 8** Volume of a cuboid
Year 5 & 6 Statistics **2 week**	**Step 1** Draw line graphs **Step 2** Read and interpret line graphs **Step 3** Read and interpret tables **Step 4** Two-way tables **Step 5** Read and interpret timetables End of block assessment (version B)	**Step 1** Line graphs **Step 2** Dual bar charts **Step 3** Read and interpret pie charts **Step 4** Pie charts with percentages **Step 5** Draw pie charts **Step 6** The mean
Summer		
Year 5 & 6 Shape **2/3 weeks**	**Step 1** Understand and use degrees **Step 2** Classify angles **Step 3** Estimate angles **Step 4** Measure angles up to 180 **Step 5** Draw lines and angles accurately **Step 6** Calculate angles around a point **Step 7** Calculate angles on a straight line **Step 8** Lengths and angles in shapes **Step 9** Regular and irregular polygons **Step 10** 3-D shapes End of block assessment (version B)	**Step 1** Measure and classify angles **Step 2** Calculate angles **Step 3** Vertically opposite angles **Step 4** Angles in a triangle **Step 5** Angles in a triangle – special cases **Step 6** Angles in a triangle – missing angles **Step 7** Angles in quadrilaterals **Step 8** Angles in polygons **Step 9** Circles **Step 10** Draw shapes accurately **Step 11** Nets of 3-D shapes End of block assessment (version B)
Year 5 & 6 Position & Direction 2 2 weeks Yr 5 1 week Yr 6	**Step 1** Read and plot coordinates **Step 2** Problem solving with coordinates **Step 3** Translation **Step 4** Translation with coordinates **Step 5** Lines of symmetry **Step 6** Reflection in horizontal and vertical lines End of block assessment (version B)	**Step 1** The first quadrant **Step 2** Read and plot points in four quadrants **Step 3** Solve problems with coordinates **Step 4** Translations **Step 5** Reflections End of block assessmnet (version B)

Year 5 Decimals **3 weeks** **Year 6 Project 8 weeks**	**Step 1** Use known facts to add and subtract decimals within 1 **Step 2** Complements to 1 **Step 3** Add and subtract decimals across 1 **Step 4** Add decimals with the same number of decimal places **Step 5** Subtract decimals with the same number of decimal places **Step 6** Add decimals with different numbers of decimal places **Step 7** Subtract decimals with different numbers of decimal places **Step 8** Efficient strategies for adding and subtracting decimals **Step 9** Decimal sequences **Step 10** Multiply by 10, 100 and 1,000 **Step 11** Divide by 10, 100 and 1,000 **Step 12** Multiply and divide decimals - missing values End of block assessment (Version B)	**White Rose Bakery** Activity 1 - Resources Best value Activity 2 - Resources Profit & loss Packaging Cooking problems Activity 6 - Resources **White Rose Tours** Climate worksheet Activity 1 - Resources Distance conversion graph Conversion Airport Activity 2 – Resources Accommodation Activity 3 - Resources Budget Activity 4 - Resources Time problem **White Rose Futures** Annual salary Hourly rates Activity 1 - Resources Bills Activity 2 - Resources Mortgage Activity 3 – Resources House Activity 4 - Resources
Year 5 Negative numbers 1 week **Year 6 Project**	**Step 1** Understand negative numbers **Step 2** Count through zero in 1s **Step 3** Count through zero in multiples **Step 4** Compare and order negative numbers **Step 5** Find the difference End of block assessment (version B)	
Year 5 Converting Units **2 weeks** **Year 6 Project**	**Step 1** Kilograms and kilometres **Step 2** Millimetres and millilitres **Step 3** Convert units of length **Step 4** Convert between metric and imperial units **Step 5** Convert units of time **Step 6** Calculate with timetables End of block assessment (version B	

Year 5 **Measurement volume** **Year 6 Project**	**Step 1** Cubic centimetres **Step 2** Compare volume **Step 3** Estimate volume **Step 4** Estimate capacity End of block assessment (version B)	

2.6 Fluency

The 2014 Maths Curriculum placed greater emphasis on the acquisition of all times tables' facts by the end of Year 4. As a result of this and the planned introduction of formal Times Table Testing during 2020 the opportunity has been taken to review approaches to the teaching of times tables and developing general fluency. Our daily sequenced curriculum specifies the teaching sequence of each aspect of mental recall of number facts including Times Tables and number bonds and the sequencing in reception encourages sound understanding from a very early start. However, as this scheme has only been in place for a relatively short period of time and the impact of periods of lockdown, we recognise that some children may not as yet be as fluent as they could be. To address this and further embed key facts into long term memory we have a daily 15 min Fluent In Five session which both revisits work already completed and also allows us to revisit key learning in order to be ready for our next topic.

As we know there is no easy shortcut to the acquisition of table knowledge although it is accepted that some children seem to pick up the facts more easily and some children are more willing to put in the extra effort at home in order to acquire those skills. Recent initiatives in school have sought to increase the profile of mental maths acquisition and include certificates of achievement in worship and inter class and inter team competitions on TT Rockstars. These initiatives have gone some way in driving up performance but now we need to take the next step and drive performance even further.

Our fluency approach includes:

- Weekly times tables' homework, supported by an appropriate test.
- TT Rockstars activities set weekly in Classes 2 upwards with continued competitions (perhaps allocated to one of the early morning slots).
- From the beginning of Year 4, fortnightly times table tests in line with the statutory tests.
- Daily Fluent in Five sessions which follow a prescribed pattern supplemented by a suggested focus for each of the half term by class (see overleaf).

The following pages identify a suggested sequence of teaching and suitable resources to use. Many experts still believe the chanting or singing of tables to be beneficial but also that the 2x table is the key table to learn properly as it is often the first one children are faced with and securing that is crucial to moving onto other tables together with all number bonds

Key Stage 1 – Fluency Plan

Half term	Reception	Year 1	Year 2
Autumn 1	Match & sort Comparing, more less Subitising 1,2 Counting to 10.	All bonds to 10 (including subtraction facts) Even & odd to 20 Doubling to 10. One more one less to 10 Counting forwards and backwards to 20	All bonds to 10 (including subtraction facts) Even & Odd to 50 Counting forwards and backwards to 50
Autumn 2	Subitising to 5 One more one less to 5 Composition to 3 Representation of numbers to 5.	All bonds to 10 (including subtraction facts) Even & odd to 20 Doubling to 10. One more one less to 20	All bonds to 200 (including subtraction facts) Count in 2's Count in 5's Count in 10's Count in 3's
Spring 1	Comparing numbers to 5. Composition of 4 & 5 (number bonds) Composition of 6,7 & 8 (number bonds)	All bonds to 10 (including subtraction facts) One more one less to 50 Count forwards backwards to 50	All bonds to 100 (tens only including subtraction facts) 2x table 5 x table 10 x table Count in 3's
Spring 2	Composition of 9 & 10 (number bonds) Comparing numbers to 10 All bonds to 10.	All bonds to 10 (including subtraction facts)	All bonds to 100 (tens and ones) Divide by 2 Divide by 5 Divide by 10
Summer 1	All bonds to 10 (including subtraction facts) Counting & recognition of numbers to 20	All bonds to 10 (including subtraction facts) Counting forwards and backwards to 50	All bonds to 100 (tens and ones) 2x table 5 x table 10 x table Count in 3's
Summer 2	All bonds to 10 (including subtraction facts) Even & odd to 20 Doubling to 10.	All bonds to 10 (including subtraction facts) Counting forwards and backwards to 100	All bonds Divide by 2 Divide by 5 Divide by 10

Key Stage 2 Fluency Plan

Half term	Year 3	Year 4	Year 5	Year 6
Autumn 1	Revise all addition and subtraction facts to 20 Review multiplication and division facts for 2x, 5x and 10x tables Count in multiples of 3 to 12x3 in order from 0 fluently.	Recall multiples of 3,4 and 8 up to 12x in any order, including missing numbers and related division facts fluently. Fluently count in 6's in order up to 12x6, using multiples of 3 to support. Know all number bonds for 100. Count in 25's and 1000's	Know decimal number bonds to 1 and 10 Recall multiples of 12 in any order, including missing numbers and related division facts fluently. Recall multiples of all times tables up to 12x12 in any order, including missing numbers and related division facts with growing fluency.	Know all previous number bonds including decimals Recall multiples of all times tables up to 12x12 in any order, including missing numbers and related division facts with growing fluency.
Autumn 2	Recall multiples of 3 up to 12x3 in any order, including missing numbers and related division facts with growing fluency. Count in multiples of 4 to 12x4 in order from 0 with growing fluency.	Recall multiples of 6 in any order, including missing numbers and related division facts with growing fluency. Fluently count in 7's in order up to 12x7.	Find factor pairs of a number Metric conversions	Identify common factors, including LCF and HCF Derive multiplication and division facts using decimal numbers
Spring 1	Know doubles and halves of all whole numbers to 20 Facts about time Recall multiples of 3 up to 12x3 in any order, including missing numbers and related division facts fluently. Count in multiples of 4 to 12x4 in order from 0 with fluently Count in multiples of 8 to 12x8 in order from 0 with growing fluency	Recall multiples of 6 in any order, including missing numbers and related division facts fluently. Recall multiples of 7 in any order, including missing numbers and related division facts with growing fluency 2 digit number bonds to 100	Identify prime numbers up to 20. Recall square numbers and square roots up to 144 Know the doubles and halves of all two-digit numbers	Identify prime numbers up to 50. Recall square numbers and square roots up to 15 x 15 Know doubles and halves of 2-digit decimals. Double and halves of all multiples of 10 to 10,000

Half term	Year 3	Year 4	Year 5	Year 6
Spring 2	Count in 50's and 100's Count in multiples of 8 to 12x8 in order from 0 with growing fluency	Know all pairs of multiples of 50 with a total of 1000. Recall multiples of 7 in any order, including missing numbers and related division facts fluently. Fluently count in 9's in order up to 12x9. Fluently count in 11's in order up to 12x11.	Know all pairs of factors of numbers up to 100.	Convert between fractions, decimals and percentages Find equivalence between fractions, decimals and percentages
Summer 1	Tell the time Know all addition and subtraction facts for multiples of 10 to 100 Count in multiples of 8 to 12x8 in order from 0 with growing fluency Recall multiples of 4 up to 12x4 in any order, including missing numbers and related division facts fluently.	Multiply and divide single digit numbers by 10 and 100	Know the decimal and percentage equivalents of the fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$, ⅓, ⅔, tenths and fifths	Metric conversions
Summer 2	Multiply and divide 1 digit numbers by 10 Recall multiples of 4 up to 12x4 in any order, including missing numbers and related division facts fluently. Recall multiples of 8 up to 12x8 in any order, including missing numbers and related division facts with growing fluency	Know the decimal and percentage equivalents of the fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$, ⅓, ⅔, tenths and fifths	Digital and analogue time equivalents	Revisit all fluency.