Northbourne CE Primary School
Nurturing Excellence.

Maths

Long Term Plan

Introduction

At Northbourne CE Primary School, our Mathematics curriculum is rooted in our vision of Nurturing Excellence. We are committed to providing a high-quality, engaging mathematics education that enables every child to develop confidence, resilience and a deep understanding of mathematical concepts. Through mathematics, pupils become fluent in key skills, reason logically and solve problems with increasing independence.

Our curriculum nurtures confident mathematicians who demonstrate courage when tackling challenges, compassion when supporting others and a strong sense of community through collaborative problem-solving. Mathematics develops pupils' cultural capital, equipping them with essential life skills to understand and interpret the world around them.

Our curriculum is informed by the National Curriculum and underpinned by teaching for mastery principles. It draws upon the White Rose Maths scheme of learning, the mixed-age planning materials produced by the NCETM (National Centre for Excellence in the Teaching of Mathematics) and a range of carefully selected high-quality mathematical resources.

Curriculum Structure and Teaching Approach

Our Mathematics curriculum is carefully structured to meet the needs of pupils across all phases while maintaining high expectations, clear progression and continuity of learning.

Teaching Structure Across the School

In Key Stage 1, pupils are taught in separate year groups, with two Year 1 classes and two Year 2 classes. This enables teachers to deliver age-specific content and secure strong foundations in early mathematical understanding.

In Lower Key Stage 2, pupils are taught in three mixed Year 3/4 classes, while Upper Key Stage 2 pupils are taught in three mixed Year 5/6 classes. Mixed-age teaching is carefully planned to ensure full curriculum coverage, progression across year groups and opportunities for pupils to revisit and deepen prior learning.

Curriculum Planning

In the Early Years Foundation Stage (EYFS), pupils follow the NCETM Mastering Number programme alongside the White Rose Maths scheme for Shape, Space and Measure. These approaches provide a strong foundation in early number sense, spatial awareness and mathematical language through practical, play-based learning and structured adult-led sessions.

In Key Stage 1, teachers follow the White Rose Maths scheme of learning, which is adapted to reflect the needs, prior learning and context of our pupils. Learning is sequenced in small, manageable steps to develop fluency, conceptual understanding and confidence. Teachers use ongoing assessment to adapt planning, address misconceptions and ensure pupils develop secure mathematical foundations before moving on.

In Lower and Upper Key Stage 2, teachers use mixed-age curriculum planning developed by the NCETM. These materials are designed specifically to support high-quality teaching within mixed-year classes and are closely aligned with the National Curriculum and teaching for mastery principles.

The NCETM mixed-age planning emphasises:

- Small-step progression in learning
- Deep conceptual understanding
- Mathematical reasoning and discussion
- Fluency alongside purposeful problem-solving
- Use of variation and representation to expose mathematical structure
- Connections across mathematical domains
- Retrieval practice and revisiting prior learning

This approach ensures pupils encounter mathematics in depth and are supported to make meaningful links between concepts over time.

Curriculum Structure and Progression

Our Mathematics curriculum follows a mastery approach, where concepts are taught in depth and revisited regularly to secure understanding. Learning is carefully sequenced, so pupils build secure foundations before progressing to more complex concepts.

Across all phases, there is a consistent focus on:

- Fluency: accurate recall of key facts and efficient procedures
- Reasoning: explaining thinking using precise mathematical vocabulary
- Problem-solving: applying mathematics in varied and increasingly sophisticated contexts

The curriculum is underpinned by the Ready-to-Progress criteria, which identify the essential concepts pupils must secure within each year group. These criteria inform curriculum sequencing and help teachers prioritise the most important mathematical understanding.

This ensures pupils:

- Consolidate learning over time
- Make meaningful connections between concepts
- Develop secure understanding before moving on
- Build confidence and resilience as mathematicians

Our curriculum provides:

- Full National Curriculum coverage
- Clear progression across all phases
- Secure fluency and conceptual understanding
- Frequent opportunities for retrieval and application
- Carefully sequenced small-step teaching
- Ongoing assessment to inform teaching and intervention

Planning is adapted to reflect pupils' needs and prior learning so that all children can access and succeed within the mathematics curriculum.

Mastering Number

Northbourne CE Primary School participates in the NCETM Mastering Number programme, developed by the National Centre for Excellence in the Teaching of Mathematics (NCETM), to strengthen pupils' fluency and number sense across the school.

In Reception and Key Stage 1, the programme is used to develop secure additive reasoning through short, frequent sessions. Pupils build a deep understanding of number, including number bonds and number composition, while developing automatic recall of key facts and confidence in mental calculation.

In Key Stage 2, Mastering Number builds on this foundation by developing pupils' multiplicative reasoning. Across Years 3 to 6, pupils strengthen their understanding of multiplication and division, including factors, multiples and number relationships, as well as early proportional reasoning.

The programme is delivered through regular, focused sessions designed to promote fluency, automaticity and conceptual understanding, ensuring clear progression in number sense from Early Years through to Upper Key Stage 2.

Mathematical Thinking and Greater Depth

Teachers supplement core planning with a range of carefully selected, research-informed resources to enrich and deepen pupils' mathematical thinking.

The school makes extensive use of NRICH to provide rich investigative tasks and problems of greater complexity. These tasks encourage pupils to reason deeply, think strategically and apply their mathematical understanding in unfamiliar contexts.

NRICH problems are also used to assess pupils' ability to demonstrate the NCETM "greater depth" characteristics of learning, particularly:

- reasoning mathematically
- solving problems in increasingly sophisticated ways

Teachers also draw upon materials from Gareth Metcalfe's I See Reasoning to strengthen mathematical discussion, reasoning and conceptual understanding. These resources support pupils in articulating their thinking clearly, identifying patterns and making mathematical connections using precise mathematical vocabulary.

The Mastering Number programmes support pupils to:

- Develop fluency and flexibility with number
- Build secure understanding of number relationships and mathematical structure
- Improve recall of key facts
- Strengthen mental calculation strategies
- Increase confidence and efficiency in mathematical thinking
- Develop deeper conceptual understanding that supports future mathematical learning

These programmes complement our wider mastery approach and help ensure pupils develop the strong foundational understanding needed for success across the mathematics curriculum.

Living Our Values Through Mathematics

Our curriculum promotes the school values of Courage, Compassion and Community.

Pupils demonstrate courage when tackling challenging problems, persevering through difficulties and learning from mistakes. They show compassion by listening respectfully to others' strategies, supporting peers and valuing different approaches to problem-solving. A sense of community is developed through collaborative learning, mathematical discussion and shared success.

Mathematics lessons encourage pupils to communicate clearly, justify their thinking and work together respectfully. Through this, pupils develop resilience, confidence and positive attitudes towards learning.

Our Mathematics curriculum aims to:

- Develop fluent, confident mathematicians
- Enable pupils to reason clearly and justify their thinking
- Build strong problem-solving skills
- Foster resilience and positive attitudes towards mathematics
- Secure deep understanding of key mathematical concepts and structures
- Develop accurate and precise mathematical vocabulary
- Apply mathematics in meaningful real-life contexts
- Encourage independence and collaboration
- Prepare pupils for Key Stage 3 and future learning

Assessment

Assessment is ongoing and integral to teaching and learning in mathematics.

Teachers use questioning, observation, discussion and analysis of pupils' work to identify understanding, address misconceptions and inform next steps in teaching. Regular retrieval practice is used to assess retention and strengthen long-term learning.

Teachers also use rich mathematical tasks, including NRICH investigations and reasoning activities, to assess pupils' depth of understanding and ability to apply mathematics in increasingly sophisticated ways.

Assessment information is used to:

- Adapt teaching
- Provide targeted intervention and support
- Identify opportunities for challenge and greater depth
- Ensure all pupils make strong progress

Inclusion and Excellence for All

In line with our vision of Nurturing Excellence, our Mathematics curriculum is inclusive, ambitious and accessible to all pupils.

Lessons use concrete, pictorial and abstract representations to support conceptual understanding and help pupils make connections between mathematical ideas. Scaffolding, adaptive teaching and precise questioning ensure that all learners can access the curriculum successfully.

The Mastering Number programme further supports fluency and confidence for all learners through short, focused sessions that develop secure understanding of number and mathematical structure.

Collaborative learning, mathematical talk and carefully chosen representations support participation and confidence for every child. Teachers provide appropriate support while maintaining high expectations for all pupils.

Opportunities for challenge, reasoning and greater depth are embedded throughout the curriculum so that pupils who are ready to deepen their understanding are able to do so through rich and sophisticated mathematical experiences.

	Number	Numerical Patterns	Shape, Space and Measure
On entry to Pre-school year	Joins in with counting songs and rhymes. React to changes of amount in a group of up to 3 items. Recites numbers to 5.	Joins in with finger rhymes with numbers.	Beginning to comment on size - "big/little". Notices patterns, for example - stripes on clothes, designs on rugs and wallpaper. Completes peg board puzzles, matching shapes/pictures together.
At the end of Autumn Term	Fast recognition of up to 3 objects, without having to count them individually ('subitising'). Recite numbers to ten.	Recognises some numerals of personal significance. Compares two groups of objects, pointing at which has more/fewer.	Sorts groups of objects according to different criteria. Explores 2D and 3D shapes, making comments such as 'pointy', 'round'. May begin to use correct names for some basic 2D shapes. Can make comparisons relating to size, using language such as big and little, small and large. Can talk about 'My day', sequencing everyday events (e.g. mealtimes)

	Number	Numerical Patterns	Shape, Space and Measure
At the end of Spring Term	Counts objects to 5 accurately, showing understanding of basic counting principles. Show 'finger numbers' up to 5. Beginning to become familiar with numbers represented on a dice, without having to count them individually ('subitising'). Begins to link some numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.	Recognises numerals 1-5. Compares two groups of objects, using the language of more/fewer.	Responds to positional language and beginning to use words like 'in front of' and 'behind'. Make comparisons between objects relating to length and weight. Select shapes appropriately when building: flat surfaces for building, a triangular prism for a roof etc. Copies and continues a simple AB pattern e.g. stone, leaf, stone, leaf
At the end of Nursery	Has a good understanding of numbers to 5. Shows good understanding of basic counting principles (e.g. 1-1 correspondence, knows that the amount stays the same however objects are arranged, knows the final number in the count represents how many there are). Recites number names in order beyond ten. Subitises to 3.	Compares amounts using the language of 'more' 'fewer'. Reads numerals to 5 and matches to an amount. Orders numbers to 5.	Uses some everyday language to talk about and compare size and shape. Recognises a repeated pattern and is creates own patterns and arrangements. Names basic 2D shapes

	Baseline into Reception	End of Autumn Term	End of Spring Term	Early Learning Goal
NUMBER	• "Have a good understanding of numbers to 5 and knows that the amount stays the same however objects are arranged." • "Rote counts to 10." • "Subitises to 3 and talks about the patterns they can see. "	• "Links numerals and amounts to 5." • "Can subitise to 5." • "Is beginning to talk about the different ways that amounts of 5 can be made."	• "Developing sense of numbers beyond 5 and can subitise to 5." • Confidently talks about the different ways that numbers can be made to 5 and is now applying this knowledge to numbers to 10. • "Links subtraction facts to composition of numbers to 5." • "Recalls double facts to 5."	• "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.
NUMERICAL PATTERNS	• "Compares amounts using the language of 'more' 'fewer'." • "Reads numerals to 5 and matches to an amount." • "Orders numbers to 5."	• Counts objects accurately to 10 using one to one correspondence, showing understanding of basic counting principles. • "Can identify when objects have the same, less than or more than." • "Recognises numbers to 5 and puts them in order."	• "Is starting to recognise the pattern of the counting system to help count beyond 10." • "Recognises patterns within number (e.g. noticing the pattern of odd, even, odd, even)."	• "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
SHAPE, SPACE & MEASURE	• "Uses some everyday language to talk about and compare size and shape." • "Recognises a repeated pattern and is creates own patterns and arrangements."	• "Uses some shape names appropriately and understands prepositional language." • "Creates a repeated pattern with colour and shape."	• "Uses mathematical language to compare and talk about shape and size."	• Has a developed range of mathematical language to describe and compare size, shape, length, weight and position.

Maths: Long Term Plan – Year 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
TERM 1	**Place value (within 10)** • Sort objects • Count objects • Count objects from a larger group • Represent objects • Recognise numbers as words • Count on from any number • 1 more • Count backwards within 10 • 1 less • Compare groups by matching • Fewer, more, same • Less than, greater than, equal to • Compare numbers • Order objects and numbers • The number line							
TERM 2	**Addition and subtraction (within 10)** • Introduce parts and wholes • Part-whole model • Write number sentences • Fact families - addition facts • Number bonds within 10 • Systematic number bonds within 10 • Number bonds to 10 • Addition - add together • Addition - add more			**Assessment Week**	**Addition and subtraction (within 10) continued.** • Addition problems • Find a part • Subtraction - find a part • Fact families - the eight facts • Subtraction - take away/cross out (How many Subtraction - take away (How many left?) • Subtraction on a number line • Add or subtract 1 or 2	**Geometry** Recognise and name 3-D shapes Sort 3-D shapes Recognise and name 2-D shapes Sort 2-D shapes Patterns with 2-D and 3-D shapes	**Consolidation**
TERM 3	**Place value (within 20)** • Count within 20 • Understand 10 • Understand 11, 12 and 13 • Understand 14, 15 and 16 • Understand 17, 18 and 19 • Understand 20 • 1 more and 1 less • The number line to 20 • Use a number line to 20 • Estimate on a number line to 20 • Compare numbers to 20 • Order numbers to 20			**Addition and subtraction (within 20)** • Add by counting on within 20 • Add ones using number bonds • Find and make number bonds to 20 • Doubles • Near doubles • Subtract ones using number bonds • Subtraction - counting back • Subtraction - finding the difference • Related facts • Missing number problems			

Maths Long Term Plan – Year 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
TERM 4	**Place value (within 50)** • Count from 20 to 50 • 20, 30, 40 and 50 • Count by making groups of tens • Groups of tens and ones • Partition into tens and ones • The number line to 50 • Estimate on a number line to 50 • 1 more, 1 less		**Length and height** • Compare lengths and heights • Measure length using objects • Measure length in centimetres	**Assessment Week**	**Length and height continued**	**Mass and volume** • Heavier and lighter • Measure mass • Compare mass • Full and empty • Compare volume • Measure capacity • Compare capacity		
TERM 5	**Multiplication and division** • Count in 2s • Count in 10s • Count in 5s • Recognise equal groups • Add equal groups • Make arrays • Make doubles • Make equal groups - grouping • Make equal groups - sharing			**Fractions** • Recognise a half of an object or a shape • Find a half of an object or a shape • Recognise a half of a quantity • Find a half of a quantity • Recognise a quarter of an object or a shape • Find a quarter of an object or a shape • Recognise a quarter of a quantity • Find a quarter of a quantity		**Position and direction** • Describe turns • Describe position - left and right • Describe position - forwards and backwards • Describe position - above and below • Ordinal numbers	
TERM 6	**Place value (within 100)** • Count from 50 to 100 • Tens to 100 • Partition into tens and ones • The number line to 100 • 1 more, 1 less • Compare numbers with the same number of tens • Compare any two numbers		**Money** • Unitising • Recognise coins • Recognise notes • Count in coins	**Assessment Week**	**Time** • Before and after • Days of the week • Months of the year • Hours, minutes and seconds • Tell the time to the hour • Tell the time to the half hour		**Consolidation**	

Maths Long Term Plan – Year 2

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
TERM 1	**Place value** • Numbers to 20 • Count objects to 100 by making 10s • Recognise tens and ones • Use a place value chart • Partition numbers to 100 • Write numbers to 100 in words • Flexibly partition numbers to 100 • Write numbers to 100 in expanded form		• 10s on the number line to 100 • 10s and 1s on the number line to 100 • Estimate numbers on a number line • Compare objects • Compare numbers • Order objects and numbers • Count in 2s, 5s and 10s • Count in 3s		**Addition and subtraction** • Bonds to 10 • Fact families - addition and subtraction bonds within 20 • Related facts • Bonds to 100 (tens) • Add and subtract 1s • Add by making 10 • Add three 1-digit numbers • Add to the next 10 • Add across a 10 • Subtract across 10 • Subtract from a 10		
TERM 2	**Addition and subtraction continued** • Subtract a 1-digit number from a 2-digit number (across a 10) • 10 more, 10 less • Add and subtract 10s • Add two 2-digit numbers (not across a 10) • Add two 2-digit numbers (across a 10) • Subtract two 2-digit numbers (not across a 10) • Subtract two 2-digit numbers (across a 10) • Mixed addition and subtraction • Compare number sentences • Missing number problems			**Assessment Week**	**Shape** • Recognise 2-D and 3-D shapes • Count sides on 2-D shapes • Count vertices on 2-D shapes • Draw 2-D shapes • Lines of symmetry on shapes • Use lines of symmetry to complete shapes • Sort 2-D shapes • Count faces on 3-D shapes • Count edges on 3-D shapes • Count vertices on 3-D shapes • Sort 3-D shapes • Make patterns with 2-D and 3-D shapes		
TERM 3	**Money** • Count money - pence • Count money - pounds (notes and coins) • Count money - pounds and pence • Choose notes and coins • Make the same amount • Compare amounts of money • Calculate with money • Make a pound • Find change • Two-step problems		**Multiplication and division** • Recognise equal groups • Make equal groups • Add equal groups • Introduce the multiplication symbol • Multiplication sentences • Use arrays • Make equal groups – grouping • Make equal groups – sharing		• The 2 times-table • Divide by 2 • Doubling and halving • Odd and even numbers • The 10 times-table • Divide by 10 • The 5 times-table • Divide by 5 • The 5 and 10 times-tables		

Maths Long Term Plan – Year 2

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
TERM 4	**Length and height** • Measure in centimetres • Measure in metres • Compare lengths and heights • Order lengths and heights • Four operations with lengths and heights		**Mass, capacity and temperature** • Compare mass • Measure in grams • Measure in kilograms • Four operations with mass	**Assessment week**	**Mass, capacity and temperature continued** • Compare volume and capacity • Measure in millilitres • Measure in litres • Four operations with volume and capacity • Temperature			
TERM 5	**Fractions** • Introduction to parts and whole • Equal and unequal parts • Recognise a half • Find a half • Recognise a quarter • Find a quarter • Recognise a third • Find a third • Find the whole • Unit fractions • Non-unit fractions • Recognise the equivalence of a half and two quarters • Recognise three-quarters • Find three-quarters • Count in fractions up to a whole			**Time** • O'clock and half past • Quarter past and quarter to • Tell time past the hour • Tell time to the hour • Tell the time to 5 minutes • Minutes in an hour • Hours in a day				
TERM 6	**Statistics** • Make tally charts • Tables • Block diagrams • Draw pictograms (1-1) • Interpret pictograms (1-1) • Draw pictograms (2, 5 and 10) • Interpret pictograms (2, 5 and 10)		**Position and direction** • Language of position • Describe movement • Describe turns • Describe movement and turns • Shape patterns with turns	**Assessment week**	**Position and direction continued**	**Consolidation**		

Maths: Long Term Plan – LKS2 CYCLE 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
TERM 1	**Add and Subtract Across 10** • Add and subtract across 10 • Secure fluency in addition and subtraction facts that bridge 10 through continued practice. complements to 100		**Numbers to 1000** • compose and decompose 100 using 1s, 10s, 20s, 25s, and 50s, and identify multiples or pairs of numbers that total 100. • represent and partition numbers up to 1,000, use flexible partitioning, and investigate hundreds, tens, and ones. • find 1, 10, and 100 more or less, locate and estimate numbers on a number line to 1,000, and compare numbers up to 1,000. • order numbers up to 1,000, identify multiples of 5 and 10, count in 50s, read a variety of scales, and find complements to 100. • find change, add and subtract numbers with and without exchanging, and add across 10 and 100.				**Column + and – to 1000** • add and subtract numbers, including adding three-digit and two-digit numbers, and subtracting across tens and hundreds.
TERM 2	**Numbers to 1000** • relate hundreds to thousands, represent numbers up to 10,000, and partition numbers to 10,000. • use flexible partitioning with numbers up to 10,000, find 1, 10, 100, and 1,000 more or less, and locate and estimate numbers on a number line to 10,000. • use a range of strategies to add and subtract multiples of 100, apply these skills to problem solving, partition 1,000 in the context of measures, understand measure conversions • partition 1,000 and 2,000 in the context of measures, use measure conversions to interpret graphs and tables, compare and order numbers to 10,000, and round numbers to the nearest 10.				Assessment Week	**Numbers to 1000** • round numbers to the nearest 100, 1,000, and 10,000, and add or subtract four-digit numbers using column methods with regrouping. • use efficient calculation strategies and explain how 1,000 is composed of 100s, 200s, 250s, and 500s.		
TERM 3	**Column addition and subtraction, measuring length** • add and subtract 4-digit numbers using column methods and measure and convert lengths between metres and centimetres.	**Response week (autumn assessments)**	**3, 6, 9 times table (2, 4, 8)** • represent and explain patterns in the 3 and 6 times tables, understand the relationships between adjacent multiples, and apply known 5-times-table facts to solve problems involving multiples of 6 • use their knowledge of the 3 and 6 times tables and their relationships to solve problems, applying divisibility rules for multiples of 3 and 6 to 3- and 4-digit numbers. • represent and explain patterns in the 9 times table, solve related problems, and apply known facts from the 10 times table to support their understanding of multiples of nine. • explain and use the relationships between the 3, 6, and 9 times tables, including pairs of facts with the same product, and apply divisibility rules for 3 and 6 to solve related problems				

Maths Long Term Plan – LKS2 CYCLE 1

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
TERM 4	**7 times tables and pattern** • represent and explain patterns in the 7 times table, solve related problems, and identify odd and even number patterns within the times tables. • represent square numbers, use divisibility rules to solve problems, and understand how wholes can be divided into equal or unequal parts, explaining the relationship between parts and their whole.		**Review of fractions** • identify and describe equal parts of a whole, construct a whole from given parts, determine how many equal parts a whole is divided into, and represent these using fraction notation.	Assessment Week	**Unit fractions** • represent unit fractions in various ways, solve problems involving equal parts of a whole, and calculate fractions of quantities by applying division facts with increasing fluency			
TERM 5	**Non-unit fractions** • identify and explain non-unit fractions, understand how wholes are divided into equal or unequal parts, and add fractions with the same denominator.	**Response week (Spring assessments)**	**Fractions greater than 1** • compose and decompose quantities made of whole numbers and fractions, explain their composition, and accurately identify and label numbers on both labelled and unlabelled number lines • use fraction sense to estimate, compare, and order mixed numbers and make efficient strategic choices when solving addition problems.		• make efficient choices when solving subtraction problems and express and convert quantities between improper fractions and mixed numbers across different units. • convert between mixed numbers and improper fractions, add and subtract mixed numbers, and select efficient strategies for subtraction.			
TERM 6	**Y3 focus (Y4 residential)** • compose and decompose polygons by joining or splitting shapes, exploring different ways to create the same whole or different wholes from given parts.	**Parallel and perpendicular sides in polygons** • draw and construct polygons and compound shapes using isometric paper, geostrips, and geoboards, investigating and identifying parallel and perpendicular sides.	**Symmetry in perpendicular shapes 1** • explore symmetry by completing patterns, composing shapes from congruent parts, and identifying lines of symmetry in 2D shapes using folding and mirrors.	Assessment Week	**Symmetry in perpendicular shapes 2** • reflect whole and dissected polygons across lines of symmetry.	**Time** • tell and write time to the nearest minute, use 'past' and 'to', understand am and pm, estimate and compare durations, and recall the number of days in months, years, and leap years.	**Perimeter**	

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
TERM 1	**Numbers to 1,000** • 3NPV–1 Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10 ; apply this to identify and work out how many 10s there are in other three-digit multiples of 10. • 3NPV–2 Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning. • 3NPV–3 Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10. • 3NPV–4 Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts. • 3AS–1 Calculate complements to 100. • 3NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10) • 1.17 Composition and calculation: 100 and bridging 100 • 1.18 Composition and calculation: three-digit numbers					**Perimeter** • 4G–2 Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons. • 2.16 Multiplicative contexts: area and perimeter 1		**Coordinates** • 4G–1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.
TERM 2	**2, 4, 8 times tables** • 3MD–1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotative and partitive division. • 3NF–2 Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number. • 3NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10). • 2.7 Times tables: 2, 4 and 8, and the relationship between them		**Assessment Week**		**Understanding and manipulating multiplicative relationships** • 4MD–1 Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size. • 4MD–2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. • 4MD–3 Understand and apply the distributive property of multiplication. • 4NF–3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100) • 2.10 Connecting multiplication and division, and the distributive law • 2.13 Calculation: multiplying and dividing by 10 or 100			
TERM 3	**Understanding and manipulating multiplicative relationships continued**		**Right Angles** • 3G–1 Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations.		**Unit fractions** • 3F–1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts. • 3F–2 Find unit fractions of quantities using known division facts (multiplication tables fluency). • 3.1 Preparing for fractions: the part–whole relationship • 3.2 Unit fractions: identifying, representing and comparing			

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
TERM 4	Unit fractions continued			Assessment Week	Time			
TERM 5	Non-Unit Fractions • 3F–1 Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts. • 3F–3 Reason about the location of any fraction within 1 in the linear number system . • 3F–4 Add and subtract fractions with the same denominator, within 1. • 3.3 Non-unit fractions: identifying, representing and comparing. • 3.4 Adding and subtracting within one whole				Fractions greater than 1 • 4F–1 Reason about the location of mixed numbers in the linear number system. • 3.5 Working across one whole: improper fractions and mixed numbers			
TERM 6	Column addition • 3AS–2 Add and subtract up to three-digit numbers using columnar methods • 1.20 Algorithms: column addition Column subtraction • 3AS–2 Add and subtract up to three-digit numbers using columnar methods. • 1.21 Algorithms: column subtraction			Assessment Week	Division with remainders • 4NF–2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders. • 2.12 Division with remainders			

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Maths: Long Term Plan – UKS2 CYCLE1

TERM 3	TERM 2	TERM 1	
			Week 1
			Week 2
			Week 3
			Week 4
			Week 5
			Week 6
			Week 7
			Week 8

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Maths: Long Term Plan – UKS2 CYCLE 1

TERM 6	TERM 5	TERM 4	
			Week 1
			Week 2
			Week 3
			Week 4
			Week 5
			Week 6
			Week 7
			Week 8

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
TERM 1	**Calculating using knowledge of structures** • 6AS/MD–1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number). • 6AS/MD–2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding. • 1.28 Common structures and the part–part–whole relationship • 1.29 Using equivalence and the compensation property to calculate				**Multiples of 1,000** • 1.26 Composition and calculation: multiples of 1,000 up to 1,000,000	**Numbers up to 10,000,000** • 6NPV–1 Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000). • 6NPV–2 Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and nonstandard partitioning. • 6NPV–3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts. • 6NPV–4 Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts. • 1.30 Composition and calculation: numbers up to 10,000,000	
TERM 2	**Decimal fractions** • 5NPV–1 Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1; Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01; Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01. • 5NPV–2 Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and nonstandard partitioning. • 1.23 Composition and calculation: tenths • 1.24 Composition and calculation: hundredths and thousandths	**Fractions** • 5F–1 Find non-unit fractions of quantities. • 3.6 Multiplying whole numbers and fractions			**Multiplication and division** • 6AS/MD–2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding. • 2.18 Using equivalence to calculate • 2.23 Multiplication strategies for larger numbers and long multiplication • 2.24 Division: dividing by two-digit divisors • 2.25 Using compensation to calculate		
TERM 3	**Multiplication and division continued**	**Area, perimeter, position and direction** • 2.30 Multiplicative contexts: area and perimeter 2			**Fractions and percentages** • 6F–1 Recognise when fractions can be simplified, and use common factors to simplify fractions. • 6F–2 Express fractions in a common denomination and use this to compare fractions that are similar in value. • 6F–3 Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy. • 3.8 Common denomination: more adding and subtracting • 3.9 Multiplying fractions and dividing fractions by a whole number • 3.10 Linking fractions, decimals and percentages		

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
TERM 4	Fractions and percentages continued	Statistics		Assessment week	Ratio and proportion • 6AS/MD–3 Solve problems involving ratio relationships. • 2.27 Scale factors, ratio and proportional reasoning			
TERM 5	Revision for KS2 SATS (including content from Cycle A and light touch converting units of measure and angles)				KS2 SATS	Mean average • 2.26 Mean average and equal shares		
TERM 6	Draw, compose and decompose shapes • 6G–1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.	Calculating using knowledge of structures (2) • 6AS/MD–2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding • 1.29 Using equivalence and the compensation property to calculate		Assessment week	Solving problems with two unknowns • 6AS/MD–4 Solve problems with 2 unknowns. • 1.31 Problems with two unknowns	Order of operations • 2.22 Combining multiplication with addition and subtraction • 2.28 Combining division with addition and subtraction		