Maths Long Term Plan

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Pupils will build on previous experiences of number from their home and nursery environments, and further develop their subitising and counting skills. They will explore the composition of numbers within 5. They will begin to compare sets of objects.		Pupils will continue to develop their subitising and counting skills and explore the composition of numbers within and beyond 5. They will begin to identify when two sets are equal or unequal and connect two equal groups to doubles.		Having started to connect quantities to numerals, pupils will consolidate their counting skills, counting to larger numbers and developing a wider range of counting strategies. They will secure knowledge of number facts through varied practise.	
Year 1	Place value (within 10)	Addition & subtraction (within 10) Shape	Place value (within 20) Addition and subtraction (within 20)	Place value (within 50) Length & height Mass & volume	Multiplication & division Fractions Position & direction	Place value (within 100) Money Time
Year 2	Place value Addition & subtraction	Addition & subtraction Shape	Money Multiplication & division	Length & height Mass, capacity & temperature Fractions	Time Statistics	Position & direction **Consolidation**
Year 3	Place value Addition & subtraction	Addition & subtraction Multiplication & division	Multiplication & division Length & perimeter	Fractions Mass & capacity	Fractions Time	Money Shape Statistics
Year 4	Place value Addition & subtraction	Area Multiplication & division	Multiplication & division Length & perimeter	Fractions Decimals	Decimals Money Time	Shape Statistics Position and direction
Year 5	Place value Addition & subtraction	Multiplication & division Fractions	Multiplication & division Fractions	Decimals & percentages Perimeter & area	Statistics Shape Position & direction	Decimals Negative numbers Converting units Volume
Year 6	Place value Addition, subtraction, multiplication & division	Fractions Ratio Converting units	Algebra Decimals Fractions, decimals and percentages	Area, perimeter & volume Shape Position and direction	Statistics **Revision**	***Problem solving and themed projects, related to topic learning E.g., theme parks***

Medium Term Plan
Year 1 | Autumn 1

Domain		Learning objectives
Place Value (within 10) 6 weeks	Week 1	LO: To sort objects LO: To count objects
	Week 2	LO: To count objects from a larger group LO: To represent objects using counters
	Week 3	LO: To recognise numbers as words LO: To count on from any number
	Week 4	LO: To find 1 more LO: To count backwards within 10 LO: To find 1 less
	Week 5	LO: To compare groups by matching LO: To find fewer, more and the same LO: To find less than, greater than and equal to
	Week 6	LO: To compare numbers LO: To order numbers and objects LO: To place numbers on a number line

Medium Term Plan
Year 1 | Autumn 2

Domain		Learning objectives
Addition and Subtraction (within 10) 5 weeks	Week 1	LO: To use a part-whole model LO: To write number sentences
	Week 2	LO: To use addition fact families LO: To use number bonds within 10 LO: To use number bonds to 10
	Week 3	LO: To add numbers together LO: To add more LO: To solve addition problems
	Week 4	LO: To find a part LO: To use the subtraction symbol LO: To write addition and subtraction fact families
	Week 5	LO: To find how many left LO: To subtract using a number line LO: To add or subtract 1 or 2
Shape 1 week	Week 6	LO: To recognise and name 2D shapes LO: To recognise and name 3D shapes LO: To sort shapes

Medium Term Plan
Year 1 | Spring 1

Domain		Learning objectives
Place Value (within 20) 3 weeks	Week 1	LO: To count within 20 LO: To understand 10 LO: To understand 11, 12 and 13 LO: To understand 14, 15 and 16
	Week 2	LO: To understand 17, 18 and 19 LO: To understand 20 LO: To find 1 more and 1 less
	Week 3	LO: To use a number line to 20 LO: To estimate on a number line to 20 LO: To compare and order numbers to 20
Addition and Subtraction (within 20) 3 weeks	Week 4	LO: To add by counting on LO: To add ones using number bonds LO: To find and makes number bonds to 20
	Week 5	LO: To recognise doubles LO: recognise near doubles LO: To subtract ones using number bonds
	Week 6	LO: To count back LO: To find the difference LO: To use related facts LO: To solve missing number problems

Medium Term Plan
Year 1 | Spring 2

Domain		Learning objectives
Place Value (within 50) 2 weeks	Week 1	LO: To count from 20 to 50 LO: To count in tens to 50
	Week 2	LO: To count in groups of tens and ones LO: To partition into tens and ones
	Week 3	LO: To place numbers on a number line to 50 LO: To estimate on a number line to 50 LO: To find 1 more or 1 less
Length and Height 1 week	Week 4	LO: To compare lengths and heights LO: To measure length using objects LO: To measure length in centimetres
Mass and Volume 2 weeks	Week 5	LO: To describe an object using heavier or lighter LO: To measure mass LO: To compare mass
	Week 6	LO: To describe a container as full or empty LO: To compare volume LO: To measure capacity LO: To compare capacity

Medium Term Plan
Year 1 | Summer 1

Domain		Learning objectives
Multiplication and Division 3 weeks	Week 1	LO: To count in 2s LO: To count in 10s LO: To count in 5s LO: To recognise equal groups
	Week 2	LO: To add equal groups LO: To make arrays LO: To make doubles
	Week 3	LO: To make equal groups *(grouping)* LO: To make equal groups *(sharing)*
Fractions 2 weeks	Week 4	LO: To recognise and find half of an object or shape LO: To recognise and find half of a quantity
	Week 5	LO: To recognise and find a quarter of an object or shape LO: To recognise and find a quarter of a quantity
Position and Direction 1 week	Week 6	LO: To describe turns LO: To describe position *(left, right, forwards, backwards, above, below)* ***NON-STATUTORY*** LO: To use ordinal numbers

Medium Term Plan
Year 1 | Summer 2

Domain		Learning objectives
Place Value (within 100) 3 weeks	Week 1	LO: To count from 50 to 100 LO: To count in tens to 100
	Week 2	LO: To partition into tens and ones LO: To place numbers on a number line to 100 LO: To find 1 more and 1 less
	Week 3	LO: To compare numbers with the same number of tens LO: To compare any two numbers
Money 1 week	Week 4	LO: To unitise LO: To recognise coins LO: To recognise notes LO: To count in coins
Time 2 weeks	Week 5	LO: To use the language of before and after LO: To sequence days of the week LO: To sequence months of the year
	Week 6	LO: To understand hours, minutes and seconds LO: To tell the time to the hour LO: To tell the time to half an hour

Medium Term Plan
Year 2 | Autumn 1

Domain	Learning objectives
Place Value 3 weeks	LO: To represent numbers to 20 LO: To represent numbers to 100 LO: To use a place value grid to represent tens and ones LO: To partition numbers to 100 LO: To write numbers to 100 in words LO: To write numbers to 100 in expanded form LO: To count in multiples of 10 on a number line LO: To represent tens and ones on a number line LO: To estimate number son a number line LO: To compare objects LO: To compare numbers LO: To order objects and numbers LO: To count in 2s, 5s and 10s LO: To count in 3s
Addition and Subtraction 3 weeks	LO: To use number bonds to 10 LO: To use fact families to 20 LO: To use related facts to calculate number bonds to 100 LO: To add and subtract 1s LO: To add by making 10 LO: To add three 1-digit numbers LO: To add to the next 10 LO: To add across a ten LO: To subtract across a ten LO: To subtract from a ten LO: To subtract a 1-digit number from a 2-digit number *(across a ten)* LO: To find 10 more and 10 less

Medium Term Plan
Year 2 | Autumn 2

Domain	Learning objectives
Addition and Subtraction 2 weeks	LO: To add and subtract 10s LO: To add two 2-digit numbers *(not across a ten)* LO: To add two 2-digit numbers *(across a ten)* LO: To subtract two 2-digit numbers *(not across a ten)* LO: To subtract two 2-digit numbers *(across a ten)* LO: To solve addition and subtraction problems LO: To compare number sentences LO: To solve missing number problems
Shape 3 weeks	LO: To recognise 2D shapes LO: To recognise 3D shapes LO: To count the sides and vertices on 2D shapes LO: To draw 2D shapes LO: To identify lines of symmetry on shapes LO: To use lines of symmetry to complete shapes LO: To sort 2D shapes LO: To count faces on 3D shapes LO: To count the sides and vertices on 3D shapes LO: To sort 3D shapes LO: To make patterns with 2D and 3D shapes

Medium Term Plan
Year 2 | Spring 1

Domain	Learning objectives
Money 2 weeks	LO: To recognise all coins and notes LO: To count money in pence LO: To count money in pounds *(coins and notes)* LO: To count money in pounds and pence LO: To make the same amount of money with varying coins and notes LO: To compare amounts of money LO: To calculate with money LO: To make a pound LO: To find change LO: To answer 2-step problems
Multiplication and Division 4 weeks	LO: To recognise equal groups LO: To make equal groups LO: To add equal groups LO: To use the multiplication symbol LO: To complete multiplication sentences LO: To use arrays to multiply LO: To make equal groups *(grouping)* LO: To make equal groups *(sharing)* LO: To use the 2 times table LO: To divide by 2 LO: To double and halve LO: To identify odd and even numbers LO: To use the 10 times table LO: To divide by 10 LO: To use the 5 times table LO: To divide by 5 LO: To use the 5 and 10 times table

Medium Term Plan
Year 2 | Spring 2

Domain	Learning objectives
Length and Height 1 week	LO: To measure in centimetres LO: To measure in metres LO: To compare lengths and heights LO: To order lengths and heights LO: To solve problems involving length and height *(4 operations)*
Mass, capacity and temperature 2 weeks	LO: To compare mass LO: To measure in grams LO: To measure in kilograms LO: To solve problems involving mass *(4 operations)* LO: To compare volume and capacity LO: To measure in millilitres LO: To measure in litres LO: To solve problems involving volume and capacity *(4 operations)* LO: To understand what temperature is
Fractions 3 weeks	LO: To know the difference between a part and a whole LO: To explore equal and unequal parts LO: To recognise and find a half LO: To recognise and find a quarter LO: To recognise and find a third LO: To find the whole *(how many equal parts)* LO: To recognise a unit fraction LO: To recognise a non-unit fraction LO: To recognise the equivalence between one half and two quarters LO: To recognise and find three-quarters LO: To count in fractions up to a whole

Medium Term Plan
Year 2 | Summer 1

Domain	Learning objectives
Time 2 weeks	LO: To tell the time to o'clock LO: To tell the time to half past LO: To tell the time to quarter past the hour LO: To tell the time to quarter to the hour LO: To tell the time past the hour *(5 minute intervals)* LO: To tell the time to the hour *(5 minute intervals)* LO: To know how many minutes are in an hour LO: To know how many hours are in a day
Statistics 3 weeks	LO: To make tally charts LO: To use simple tables LO: To understand block diagrams LO: To draw pictograms (1:1) LO: To interpret pictograms (1:1) LO: To draw pictograms (2, 5 and 10) LO: To interpret pictograms (2, 5 and 10)
TESTING	**KS1 SATs Assessments**

Medium Term Plan
Year 2 | Summer 2

Domain	Learning objectives
Position and Direction 2 weeks	LO: To use the language of position LO: To describe movement LO: To describe turns LO: To describe movement and turns LO: To create shape patterns with turns
Consolidation 3 weeks	*Consolidation of core maths methods in readiness for KS2 *(4 operations)* *Problem solving

Medium Term Plan
Year 3 | Autumn 1

Domain	Learning objectives
Place Value 2 weeks	LO: To represent and partition numbers to 100 LO: To position numbers on a number line to 100 LO: To represent and partition numbers to 1,000 LO: To find 1, 10 or 100 more or less than a given number LO: To position numbers on a number line to 1,000 LO: To estimate on a number line to 1,000 LO: To order and compare numbers to 1,000 LO: To count in 50s
Addition and Subtraction 4 weeks	LO: To apply number bond knowledge to addition and subtraction *(32 + 8)* LO: To add and subtract 1s LO: To add and subtract 10s LO: To add and subtract 100s LO: To add 1s across a 10 LO: To add 10s across a 100 LO: To subtract 1s across a 10 LO: To subtract 10s across a 100 LO: To add two numbers (no exchange) LO: To subtract two numbers (no exchange) LO: To add two numbers across a 10 LO: To add two numbers across a 100 LO: To subtract two numbers across a 10 LO: To subtract two numbers across a 100

Medium Term Plan
Year 3 | Autumn 2

Domain	Learning objectives
Addition and Subtraction 3 weeks	LO: To add 2- and 3-digit numbers LO: To subtract a 2-digit number from a 3-digit number LO: To make complements to 100 LO: To estimate answers to calculations LO: To inverse operations to check answers for accuracy
Multiplication and Division 3 weeks	LO: To use arrays to make equal groups LO: To count in multiples of 2, 5 and 10 LO: To multiply by 3 LO: To divide by 3 LO: To multiply by 4 LO: To divide by 4 LO: To multiply by 8 LO: To divide by 8 LO: To use and apply the 3, 4 and 8 times table

Medium Term Plan
Year 3 | Spring 1

Domain	Learning objectives
Multiplication and Division 3 weeks	LO: To count in multiples of 10 LO: To use known facts to answer related calculations LO: To reason about multiplication LO: To multiply a 1-digit number by a 2-digit number *(no exchange)* LO: To multiply a 1-digit number by a 2-digit number *(with exchange)* LO: To link multiplication and division LO: To divide a 2-digit number by a 1-digit number LO: To divide a 2-digit number by a 1-digit number *(with remainders)* LO: To use language of scaling LO: To solve correspondence problems
Length and Perimeter 3 weeks	LO: To measure in metres and centimetres LO: To measure in millimetres LO: To measure in millimetres and centimetres LO: To convert between millimetres, centimetres and metres LO: To compare lengths LO: To add lengths LO: To subtract lengths LO: To understand perimeter LO: To measure perimeter LO: To calculate perimeter

Medium Term Plan
Year 3 | Spring 2

Domain	Learning objectives
Fractions 3 weeks	LO: To understand the language of numerator and denominator LO: To understand the denominators of unit fractions LO: To compare and order unit fractions LO: To understand the numerators of non-unit fractions LO: To understand the whole *(how many equal parts)* LO: To compare and order non-unit fractions LO: To apply knowledge of fractions to scales LO: To place fractions on a number line LO: To count in fractions on a number line LO: To position equivalent fractions on a number line LO: To use bar models to find equivalent fractions
Mass and Capacity 2 weeks	LO: To measure mass in grams LO: To measure mass in grams and kilograms LO: To convert between grams and kilograms LO: To compare mass LO: To add and subtract mass LO: To measure capacity and volume in millilitres LO: To measure capacity and volume in litres and millilitres LO: To convert between litres and millilitres LO: To compare capacity and volume LO: To add and subtract capacity and volume

Medium Term Plan
Year 3 | Summer 1

Domain	Learning objectives
Fractions 2 weeks	LO: To add fractions LO: To subtract fractions LO: To partition the whole LO: To find unit fractions of a set of objects LO: To find non-unit fractions of a set of objects LO: To find fractions of amounts
Time 3 weeks	LO: To know Roman numerals to 12 LO: To use am and pm LO: To sequence years, months and days LO: To know how many hours are in a day *(and related facts)* LO: To tell the time to the hour LO: To tell the time to half the hour LO: To tell the time quarter past the hour LO: To tell the time quarter to the hour LO: To tell the time past the hour (*5 minute intervals)* LO: To tell the time past the hour *(1 minute intervals)* LO: To tell the time to the hour *(5 minutes intervals)* LO: To tell the time to the hour *(1 minute intervals)* LO: To interpret durations of events *(start and end times)* LO: To use minutes and seconds in context LO: To solve problems involving time

Medium Term Plan
Year 3 | Summer 2

Domain	Learning objectives
Money 2 weeks	LO: To recognise all coins and notes LO: To convert between pounds and pence LO: To add money LO: To subtract money LO: To find change
Shape 2 weeks	LO: To describe turns and angles LO: To identify right angles LO: To compare angles LO: To measure and draw accurately LO: To identify horizontal and vertical lines LO: To identify parallel and perpendicular lines LO: To recognise and describe 2D shapes LO: To draw polygons LO: To recognise and describe 3D shapes LO: To make 3D shapes
Statistics 2 weeks	LO: To interpret pictograms LO: To draw pictograms LO: To interpret bar charts LO: To draw bar charts LO: To collect and present data LO: To interpret information from two-way tables

Medium Term Plan
Year 4 | Autumn 1

Domain	Learning objectives
Place Value 3 weeks	LO: To represent and partition numbers up to 1,000 LO: To represent and partition numbers up to 10,000 LO: To find 1, 10, 100 or 1,000 more or less than a given number LO: To use a number line to position numbers up to 10,000 LO: To estimate on a number line to 10,000 LO: To compare and order numbers to 10,000 LO: To recognise and use Roman numerals LO: To round to the nearest 10 LO: To round to the nearest 100 LO: To round to the nearest 1,000 LO: To count backwards through 0 to include negative numbers
Addition and Subtraction 3 weeks	LO: To add and subtract 1s and 10s LO: To add and subtract 100s and 1000s LO: To add up to two 4-digit numbers *(no exchange)* LO: To add two 4-digit numbers (*one exchange)* LO: To add two 4-digit numbers *(more than one exchange)* LO: To subtract two 4-digit numbers *(no exchange)* LO: To subtract two 4-digit numbers *(one exchange)* LO: To subtract two 4-digit numbers *(more than one exchange)* LO: To use efficient strategies for subtraction LO: To estimate answers LO: To check answers for accuracy, using the inverse

Medium Term Plan
Year 4 | Autumn 2

Domain	Learning objectives
Area 2 week	LO: To understand area LO: To calculate the area by counting squares LO: To make rectilinear shapes LO: To compare the area of shapes
Multiplication and Division 4 weeks	**LO: To multiply and divide by 3** **LO: To use the 3 times table and related division facts** **LO: To multiply and divide by 4** **LO: To use the 4 times table and related division facts** **LO: To multiply and divide by 8** LO: To use the 8 times table and related division facts LO: To multiply and divide by 6 LO: To use the 6 times table and related division facts LO: To multiply and divide by 9 LO: To use the 9 times table and related division facts LO: To use the 3, 6 and 9 times table LO: To multiply and divide by 7 LO: To use the 7 times table and related division facts LO: To use the 11 times table and related division facts LO: To use the 12 times table and related division facts LO: To multiply by 1 and 0 LO: To divide a number by 1 and itself LO: To multiply 3 numbers LO: To identify and use factor pairs LO: To multiply by 10 and 100 LO: To divide by 10 and 100

Medium Term Plan
Year 4 | Spring 1

Domain	Learning objectives
Multiplication and Division 3 weeks	LO: To use related facts to answer multiplication and division calculations LO: To use informal written methods for multiplication LO: To multiply a 2-digit number by a 1-digit number LO: To multiply a 3-digit number by a 1-digit number LO: To divide a 2-digit number by a 1-digit number LO: To divide a 3-digit number by a 1-digit number LO: To solve correspondence problems LO: To use strategies for efficient multiplication
Length and Perimeter 2 weeks	LO: To measure in kilometres and metres LO: To calculate equivalent lengths LO: To calculate perimeter LO: To calculate the perimeter of a rectangle LO: To calculate the perimeter of rectilinear shapes LO: To find missing lengths in rectilinear shapes LO: To calculate the perimeter of regular polygons LO: To calculate the perimeter of polygons

Medium Term Plan
Year 4 | Spring 2

Domain	Learning objectives
Decimals 2 weeks	**LO: To understand the language of numerator and denominator** LO: To represent tenths as fractions LO: To represent tenths as decimals LO: To represent tenths on a place value grid LO: To represent tenths on a number line LO: To divide a 1-digit number by 10 LO: To divide a 2-digit number by 10 LO: To write hundredths as fractions LO: To write hundredths as decimals LO: To represent hundredths on a place value grid LO: To divide a 1- or 2-digit number by 10 or 100
Fractions 4 weeks	LO: To understand the whole *(how many equal parts)* LO: To count in fractions to and beyond 1 LO: To partition a mixed number LO: To position mixed numbers on a number line LO: To compare and order mixed numbers LO: To understand improper fractions LO: To convert mixed numbers to improper fractions LO: To convert improper fractions to mixed numbers LO: To position equivalent fractions on a number line LO: To identify equivalent fraction families LO: To add two or more fractions **(starting with same denominators)** LO: To add fractions and mixed numbers LO: To subtract two fractions LO: To subtract from whole amounts LO: To subtract from mixed numbers

Medium Term Plan
Year 4 | Summer 1

Domain	Learning objectives
Decimals 2 weeks	LO: To make a whole with tenths LO: To make a whole with hundredths LO: To partition decimals LO: To compare and order decimals LO: To round decimals to the nearest whole number LO: To write halves and quarters as decimals
Money 2 weeks	LO: To write money using decimals LO: To convert between pounds and pence LO: To compare amounts of money LO: To estimate with money LO: To calculate with money LO: To solve problems with money
Time 2 weeks	LO: To sequence days, weeks, months and years **LO: To convert between hours, minutes and seconds** **LO: To tell the time past the hour (*5 minute intervals)*** **LO: To tell the time past the hour *(1 minute intervals)*** **LO: To tell the time to the hour *(5 minutes intervals)*** **LO: To tell the time to the hour *(1 minute intervals)*** LO: To interpret durations of events *(start and end times)* LO: To convert between analogue and digital times LO: To convert to and from the 24-hour clock

Medium Term Plan
Year 4 | Summer 2

Domain	Learning objectives
Shape 2 weeks	**LO: To identify horizontal and vertical lines** **LO: To identify parallel and perpendicular lines** LO: To understand angles as turns LO: To identify angles LO: To compare and order angles LO: To explore different types of triangles LO: To explore different types of quadrilaterals LO: To explore the meanings of regular and irregular polygons LO: To identify any lines of symmetry in a shape LO: To complete a symmetric figure
Statistics 1 week	LO: To count backwards through 0 to include negative numbers LO: To interpret charts LO: To solve comparison, sum and difference problems LO: To interpret line graphs LO: To draw line graphs
Position and Direction 2 weeks	LO: To describe position using coordinates LO: To plot coordinates LO: To draw 2D shapes on a grid LO: To translate shapes LO: To describe translation

Medium Term Plan
Year 5 | Autumn 1

Domain	Learning objectives
Place Value 3 weeks	LO: To recognise and use Roman numerals to 1,000 LO: To read, write and represent numbers to 10,000 LO: To read, write and represent numbers to 100,000 LO: To partition numbers to 1,000,000 LO: To read, write and represent numbers to 1,000,000 LO: To make numbers 10 times smaller and 10 times greater (*powers of 10)* LO: To find more or less than a given number *(10/100/1,000/10,000/100,000)* LO: To compare and order numbers to 100,000 LO: To compare and order numbers to 1,000,000 LO: To round to the nearest 10, 100 or 1,000 LO: To round within 100,000 LO: To round within 1,000,000
Addition and Subtraction 3 weeks	LO: To use mental strategies to calculate the sum and difference LO: To add whole numbers with more than 4 digits LO: To subtract whole numbers with more than 4 digits LO: To use rounding to estimate the answers to calculations and check for accuracy LO: To use the inverse to check answers are correct *(addition and subtraction)* LO: To solve multi-step addition and subtraction problems LO: To compare calculations LO: To solve missing number problems

Medium Term Plan
Year 5 | Autumn 2

Domain	Learning objectives
Multiplication and Division 2 weeks	LO: To find the multiples of a given number LO: To find common multiples of pairs of numbers LO: To find the factors of a given number LO: To find common factors of pairs of numbers LO: To use knowledge of factors to recognise prime numbers LO: To recognise and use square numbers LO: To recognise and use cube numbers LO: To multiply by 10, 100 and 1,000 LO: To divide by 10, 100 and 1,000 LO: To use related facts to multiply and divide by 10, 100 and 1,000
Fractions 4 weeks	LO: To find fractions equivalent to a unit fraction LO: To find fractions equivalent to a non-unit fractions LO: To recognise equivalent fractions LO: To convert between improper fractions and mixed numbers LO: To convert mixed numbers to improper fractions LO: To compare fractions less than 1 LO: To order fractions less than 1 LO: To compare and order fractions greater than 1 LO: To add and subtract fractions with the same denominator LO: To add fractions within 1 LO: To add fractions with a total greater than 1 LO: To add to a mixed number LO: To add two mixed numbers LO: To subtract fractions LO: To subtract from a mixed number *(including breaking the whole)* LO: To subtract two mixed numbers

Medium Term Plan
Year 5 | Spring 1

Domain	Learning objectives
Multiplication and Division 3 weeks	LO: To multiply up to a 4-digit number by a 1-digit number LO: To use grid method to multiply a 2-digit number by a 2-digit number LO: To use column method to multiply a 2-digit number by a 2-digit number LO: To multiply a 3-digit number by a 2-digit number LO: To multiply a 4-digit number by a 2-digit number LO: To solve multiplication problems LO: To use short division LO: To divide a 4-digit number by a 1-digit number LO: To divide with remainders LO: To choose efficient strategies LO: To solve problems involving multiplication and division
Fractions 3 weeks	LO: To multiply a unit fraction by an integer LO: To multiply a non-unit fraction by an integer LO: To multiply a mixed number by an integer LO: To calculate a fraction of a quantity *(bar model)* LO: To calculate the fraction of an amount LO: To use a fraction of an amount to find the whole LO: To use fractions as operators

Medium Term Plan
Year 5 | Spring 2

Domain	Learning objectives
Decimals and Percentages 3 weeks	LO: To recognise and use tenths and hundredths *(up to two decimal places)* LO: To identify equivalent fractions and decimals *(tenths)* LO: To identify equivalent fractions and decimals *(hundredths)* LO: To convert between fractions and decimals LO: To write thousandths as fractions LO: To write thousandths as decimals LO: To represent thousandths on a place value chart LO: To order and compare decimals *with the same number of decimal places* LO: To order and compare any decimals with up to 3 decimal places LO: To round decimals to the nearest whole number LO: To round to 1 decimal place LO: To understand what a percentage is % LO: To write percentages as fractions LO: To write percentages as decimals LO: To convert between fractions, decimals and percentages
Perimeter and Area 2 weeks	LO: To calculate the perimeter of rectangles LO: To calculate the perimeter of rectilinear shapes LO: To calculate the perimeter of polygons LO: To calculate the area of rectangles LO: To calculate the area of compound shapes LO: To estimate the area of a shape

Medium Term Plan
Year 5 | Summer 1

Domain	Learning objectives
Statistics 1 week	LO: To read and interpret line graphs LO: To draw line graphs LO: To read and interpret two-way tables LO: To read and interpret timetables
Shape 2 weeks	LO: To understand and use degrees LO: To classify angles LO: To estimate the size of angles LO: To measure angles up to 180° LO: To draw lines and angles accurately LO: To calculate angles around a point LO: To calculate angles on a straight line LO: To measure lengths and angles in shapes LO: To identify regular and irregular polygons LO: To recognise the names and properties of 3D shapes
Position and direction 2 weeks	LO: To read and plot coordinates LO: To solve problems involving coordinates LO: To translate shapes LO: To translate shapes using coordinates LO: To identify lines of symmetry LO: To reflect shapes horizontally LO: To reflect shapes vertically

Medium Term Plan
Year 5 | Summer 2

Domain	Learning objectives
Decimals 3 weeks	LO: To use known facts to add and subtract decimals within 1 LO: To add and subtract decimals across 1 LO: To add decimals with the same number of decimal places LO: To subtract decimals with the same number of decimal places LO: To add decimals with a different number of decimal places LO: To subtract decimals with a different number of decimal places LO: To use efficient strategies for adding and subtracting decimals LO: To sequence decimals LO: To multiply by 10, 100 and 1,000 LO: To divide by 10, 100 and 1,000 LO: To solve missing value problems
Negative numbers 1 week	LO: To understand negative numbers in context LO: To count through zero in ones LO: To count through zero in multiples LO: To compare and order negative numbers LO: To find the difference
Convert units 1 week	LO: To measure in kilograms and kilometres LO: To measure in millimetres and millilitres LO: To convert units of length LO: To convert between metric and imperial units of measure LO: To convert between units of time and calculate timetables
Volume 1 week	LO: To understand volume in cubic cm LO: To compare volume LO: To estimate volume LO: To estimate capacity

Medium Term Plan
Year 6 | Autumn 1

Domain	Learning objectives
Place Value 2 weeks	LO: To represent numbers to 1,000,000 LO: To represent numbers to 10,000,000 LO: To read and write numbers to 10,000,000 LO: To recognise and use Powers of 10 LO: To position numbers on a number line to 10,000,000 LO: To compare and order any integers LO: To round any number LO: To use negative numbers in context
Addition, Subtraction, Multiplication and Division 4 weeks	LO: To add and subtract integers LO: To find common factors LO: To find common multiples LO: To use the rules of divisibility LO: To recognise and use prime numbers *(to 100)* LO: To recognise and use square and cube numbers LO: To multiply a 4-digit number by a 2-digit number LO: To solve multiplication problems LO: To use short division LO: To divide using factors LO: To use long division LO: To use long division with remainders LO: To solve division problems LO: To solve multi-step problems LO: To learn the order of operations (BIDMAS) LO: To estimate answers to calculations LO: To use known facts to reason

Medium Term Plan
Year 6 | Autumn 2

Domain	Learning objectives
Fractions 3 weeks	LO: To find equivalent fractions by simplifying LO: To position equivalent fractions on a number line LO: To compare and order fractions *(denominator)* LO: To compare and order fractions *(numerator)* LO: To add and subtract simple fractions LO: To add and subtract any two fractions LO: To add mixed numbers LO: To subtract mixed numbers LO: To solve multi-step problems LO: To multiply fractions by integers LO: To multiply fractions by fractions LO: To divide a fraction by an integer LO: To divide any fraction by an integer LO: To calculate the fraction of an amount LO: To use a fraction of an amount to find the whole
Ratio 2 weeks	LO: To use ratio language and the ratio symbol LO: To relate fractions to ratio LO: To calculate ratio LO: To use scale factors LO: To solve ratio and proportion problems in context *(recipes)*
Convert Units 1 week	LO: To recognise, read and write metric measures LO: To convert between metric measures LO: To convert between miles and kilometres LO: To calculate with metric measures LO: To recognise, read and write imperial measures

Medium Term Plan
Year 6 | Spring 1

Domain	Learning objectives
Algebra 2 weeks	LO: To use function machines *(1-step and 2-step)* LO: To form algebraic expressions using letters to represent numbers LO: To find the value of expressions *(by substituting)* LO: To understand and use formulae LO: To form equations LO: To solve equations *(1-step and 2-step)* LO: To find pairs of values LO: To solve problems with two unknowns
Decimals 2 weeks	LO: To represent the value of each digit in a decimal LO: To explore numbers that are greater than one with 3 decimal places LO: To round decimals LO: To add and subtract decimals LO: To multiply by 10, 100 and 1,000 LO: To divide by 10, 100 and 1,000 LO: To multiply decimals by integers LO: To divide decimals by integers LO: To multiply and divide decimals in context
Fractions, Decimals and Percentages 2 weeks	LO: To identify equivalent fractions and decimals LO: To recognise factions as division LO: To understand percentages % LO: To write fractions as percentages LO: To identify equivalent fractions, decimals and percentages LO: To order fractions, decimals and percentages LO: To calculate calculate percentages of amounts *(10%)* LO: To calculate calculate percentages of amounts *(1%)* LO: To calculate calculate percentages of amounts *(multi-step: 30%)*

Medium Term Plan
Year 6 | Spring 2

Domain	Learning objectives
Area, Perimeter and Volume 2 weeks	LO: To calculate the area of shapes LO: To calculate the perimeter of shapes LO: To calculate the area of a triangle by counting squares LO: To calculate the area of a right-angled triangle LO: To calculate the area of any triangle LO: To calculate the area of a parallelogram LO: To calculate volume using cubes LO: To find the volume of a cuboid
Shape 2 weeks	LO: To measure and classify angles LO: To calculate angles LO: To calculate vertically opposite angles LO: To calculate the angles in a triangle LO: To calculate the angles in a quadrilateral LO: To calculate angles in a polygon LO: To find the radius and diameter of a circle LO: To draw shapes accurately LO: To explore and use the nets of 3D shapes
Position and Direction 1 week	LO: To use coordinates in a first quadrant LO: To read and plot points in four quadrants LO: To solve problems with coordinates LO: To translate shapes LO: To reflect shapes

Medium Term Plan
Year 6 | Summer 1

Domain	Learning objectives
Statistics 1 week	LO: To read, interpret and draw line graphs LO: To read and interpret dual bar charts LO: To read and interpret pie charts LO: To use pie charts with percentages LO: To draw pie charts LO: To calculate the mean
2 weeks	**REVISION**
Week 4: KS2 Statutory Testing: SATs Week	

Medium Term Plan
Year 6 | Summer 2

Learning objectives

*Calculator skills
*Consolidation of core Maths methods
*Themed topic challenges *e.g., theme parks*
*Problem solving tasks *e.g., student Enterprise*

Planning devised in collaboration with:

White Rose EDUCATION

NCETM
NATIONAL CENTRE FOR EXCELLENCE IN THE TEACHING OF MATHEMATICS

HAWLEY PRIMARY SCHOOL
LEARNING FOR LIFE