Forest Class Y3/4 Maths Planning Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Aut 1	**Number - Place Value 1** Count, read, write numbers Represent/partition numbers Compare numbers		**Number - Addition and Subtraction 1** Mental strategies Related facts within 100		**Measures – Length** Measure and compare Add and subtract Measure perimeter	**Number – Multiplication and Division 1** Counting in 2s, 3s, 5s, and 6s. Mental strategies Facts for the 2, 5, 10, 3, 6, 12 x tables	
Aut 2	**Number – Fractions including Decimals 1** Fractions as numbers Unit & non unit fractions of quantities Tenths and hundredths		**Number - Addition and Subtraction 2** Mental strategies Complements to 100 Problems using most efficient method		**Geometry 1** Recognise, name, describe, draw and make shapes.	**Measures – Time 1** Time to 5 minutes - analogue	**Assess & Review**
Spr 1	**Number - Place Value 2** Count, compare, order Rounding Reading scales	**Number - Addition and Subtraction 3** Column + and – Missing number problems using inverse		**Measures – Money** Adding & subtracting money Giving change	**Number – Multiplication and Division 2** Counting in 4s, 8s, 7s and 9s Facts for the 4, 7, 8, 9, 11 x tables Written strategies Missing number problems & problems in context		
Spr 2	**Number – Fractions including Decimals 2** Equivalent Fractions Compare and order fractions and decimals Rounding decimals		**Geometry 2** Angles	**Statistics 1** Interpreting tables, pictograms, bar charts. Solving one step problems.	**Measures – Time 2** Time to 5 minutes – analogue and digital 12 and 24 hour times	**Assess & Review**	
Sum 1	**Number - Place Value 3** Count, compare, order numbers Roman numerals	**Number – Multiplication and Division 3** Facts to 12x12 Written strategies Problems in context		**Number - Addition and Subtraction 4** Column + and – Estimating answers Use of inverse to check answers		**Statistics 2** Presenting tables, pictograms, bar charts. Solving two step problems.	
Sum 2	**Measures – Mass, volume and capacity** Measure and compare Add and subtract	**Number – Fractions including Decimals 3** Add & subtract fractions Fractions on number line Decimal equivalents to fractions		**Geometry 3** Position and direction	**Measures – Time 3** Time to minutes – analogue and digital 12 and 24 hour times	**Assess & Consolidate**	

Number and Place Value

YEAR 3 NC Objectives	YEAR 4 NC Objectives
Counting	
Count from 0 in multiples of 4, 8, 50 and 100 Find 10 or 100 more or less than a given number	count backwards through zero to include negative numbers count in multiples of 6, 7, 9, 25 and 1 000 find 1 000 more or less than a given number
Comparing Numbers	
Compare and order numbers up to 1 000	order and compare numbers beyond 1 000
Identifying, Estimating and Representing Numbers	
Identify, represent and estimate numbers using different representations	identify, represent and estimate numbers using different representations
Reading and Writing Numbers	
Read and write numbers up to 1000 in numerals and in words	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.
Understanding Place Value	
Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)	recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
Rounding	
	round any number to the nearest 10, 100 or 1000
Problem Solving	
Use place value and number facts to solve problems Solve number problems and practical problems involving these ideas.	solve number and practical problems that involve all of the above and with increasingly large positive numbers
Ready to Progress Criteria	
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*	***4NPV–1*** *Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit*

Autumn Content Y3/4 and Y4 only	Spring Content Y3/4 and Y4 only	Summer Content Y3/4 and Y4 only
Place Value 1 Count from 0 in multiples of 50, 25, 100 and 1000 Count backwards through zero to include negative numbers Read and write numbers to 1000 in numerals and words. Thousands, Hundreds, Tens and Ones - identify and represent numbers up to 1000 and beyond using different representations. Partition 3 digit/4 digit numbers into thousands, hundreds, tens and ones in different ways. Find 1, 10, 100, 1000 more or less than a number to 1000/more than 1000 Compare two numbers/quantities to 1000 and beyond. Identify greatest/least. Recap <, > and = symbols.	**Place Value 2** Count from 0 in multiples of 4, 6 and 8. Order a set of numbers up to 1000. round any number to the nearest 10, 100 or 1000 Partition 3 digit/4 digit numbers – compose and decompose numbers using standard and non-standard partitioning. Read scales and place numbers to 1000 on number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts. (*Divide 100 into 2, 4, 5 and 10 equal parts*). Begin to reason about their location.	**Place Value 3** Revise previous counting Count from 0 in multiples 7 and 9 Place numbers to 1000 on marked and unmarked number lines, reasoning about their location (*number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts).* Compare and order numbers to 1000 and beyond using <, > and = signs. 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. Solve place value problems.

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*	*multiples of 100.* ***4NPV–2*** *Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and non-standard partitioning.* ***4NPV–3*** *Reason about the location of any fourdigit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each.* ***4NPV–4*** *Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.*			

Addition and Subtraction				
YEAR 3 NC Objectives	**YEAR 4 NC Objectives**	**Autumn Content Y3/4 and Y4 only**	**Spring Content Y3/4 and Y4 only**	**Summer Content Y3/4 and Y4 only**
Mental Calculation		**Addition and Subtraction 1** Secure fluency in addition and subtraction facts to 20 particularly those that bridge 10 e.g. 7 + 5, 12 – 5. Scale number facts by 10 e.g. 7 + 5 = 12, 12 -5 = 7 so 70 + 50 = 120 120-50 = 70. Fact families – related addition and subtraction facts. Understand inverse relationship between + and -.	**Addition and Subtraction 3** Add and subtract up to 3/4 digits using column addition and subtraction. Solve addition and subtraction problems, including two-step problems and missing number problems using part, part whole (use the inverse)	**Addition and Subtraction 4** Add and subtract up to 3 digits using column addition and subtraction, estimating answers first. Estimate and use inverse to check answers. Solve addition and subtraction problems, including two-step problems and missing number problems using the inverse.
Add and subtract numbers mentally, including: * a three-digit number and ones * a three-digit number and tens * a three-digit number and hundreds				
Written Methods				
Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate			
Inverse Operations, Estimating and Checking Answers				
Estimate the answer to a calculation and use inverse operations to check answers	estimate and use inverse operations to check answers to a calculation			
Problem Solving				
Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why			
Ready to Progress Criteria				
3NF–1 *Secure fluency in addition and*	***4NF–3*** *Apply place-value knowledge to known*			

subtraction facts that bridge 10, through continued practice. ***3NF–3** Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10)* **3AS–1** Calculate complements to 100 ***3AS–2** Add and subtract up to three-digit numbers using columnar methods.* ***3AS–3** Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction*	*additive and multiplicative number facts (scaling facts by 100)*	Mentally add and subtract a 3 digit number and ones – bridging through 10 (e.g. 125 + 7 = 125 + 5 + 2) and using compensation e.g. (146 + 9 = 146 + 10 – 1). Mentally add and subtract a 3 digit number and tens. Mentally add and subtract a 3 digit number and hundreds. **Addition and Subtraction 2** Add 2 two, three or four digit numbers using partitioning and subtract 2 two, three or four digit numbers by counting on to find the difference. Expanded column method for + and -. Calculate complements to 100. Solve addition and subtraction problems including two-step problems using concrete objects, pictorial representations, jottings and mental methods taught		

Multiplication and Division				
YEAR 3 NC Objectives	**YEAR 4 NC Objectives**	**Autumn Content Y3/4 and Y4 only**	**Spring Content Y3/4 and Y4 only**	**Summer Content Y3/4 and Y4 only**
Multiplication and Division Facts				
Count from 0 in multiples of 4, 8, 50 and 100	count in multiples of 6, 7, 9, 25 and 1 000	**Multiplication and**	**Multiplication and**	**Multiplication and**

Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	(copied from Number and Place Value) recall multiplication and division facts for multiplication tables up to 12 × 12	**Division 1** Count from 0 in multiples of 2, 3, 5 and 6 Multiplication and division facts for the 2, 5, 10, 3, 6, 12 x tables Mental strategies for multiplication and division using known tables facts including multiplying together 3 numbers Fact families – related x and ÷ facts. Scale number facts by 10 and 100 e.g. 3 x 5 = 15, 15 ÷ 5 = 3 so 30 x 5 = 150, 150 ÷ 5 = 30. Recognise and use factor pairs and commutativity in mental calculations Solve problems, including missing number problems, involving x and + plus using distributive law to multiply	**Division 2** Count from 0 in multiples 4, 8, 7 and 9 Multiplication and division facts for the 4, 7, 8, 9, 11 x tables Missing number problems. Mental strategies including multiplying by 0 and 1/ dividing by 1 Multiply a two-digit or three-digit number by a one digit number using the grid method/formal written layout Division on a number line – chunking for larger numbers. Solve problems, including missing number problems, involving x and + plus integer scaling problems	**Division 3** Revise all previous counting Multiplication and division facts for the 3, 4 and 8 x tables/all tables to 12x12 Multiply a two-digit or three-digit number by a one digit number using the grid method/formal written layout Division on a number line – chunking for larger numbers. Solve problems, including missing number problems, involving x and + plus harder correspondence problems in which m objects are connected to n objects (for example, 3 hats and 4 coats, how many different outfits?)
Mental Calculation				
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	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 (appears also in Properties of Numbers)			
Written Calculation				
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	multiply two-digit and three-digit numbers by a one-digit number using formal written layout			
Properties of Numbers: Multiples, Factors, Primes, Square and Cube Numbers				
	recognise and use factor pairs and commutativity in mental calculations (repeated)			
Problem Solving				
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	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			
Ready to Progress Criteria				
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)* ***3MD–1*** *Apply known multiplication and division*	***4NF–1*** *Recall multiplication and division facts up to 12X12, and recognise products in multiplication tables as multiples of the corresponding number.* ***4NF–2*** *Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context.*			

facts to solve contextual problems with different structures, including quotative and partitive division	***4NF–3** Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)* ***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.*			

Fractions (including Decimals)				
YEAR 3 NC Objectives	**YEAR 4 NC Objectives**	**Autumn Content Y3/4 and Y4 only**	**Spring Content Y3/4 and Y4 only**	**Summer Content Y3/4 and Y4 only**
Count in Fractional Steps		**Fractions 1**	**Fractions 2**	**Fractions 2**
Count up and down in tenths	count up and down in hundredths	Recognise and use unit and non-unit fractions as numbers. Find unit and non-unit fractions of a discrete set of objects. Count up and down in tenths and hundredths Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. Recognise that hundredths arise when dividing an object by one	Recognise families of common equivalent fractions using diagrams. Compare and order unit fractions and fractions with the same denominator. Compare numbers with the same number of decimal places up to two decimal places Round decimals with one decimal place to the nearest whole number Solve simple measure and money problems involving fractions and decimals to	Add and subtract fractions with the same denominator within and above one whole 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 Reason about the location of any fraction within 1 in the linear number system. Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, 3/4
Recognising Fractions				
Recognise, find, write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators 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 that hundredths arise when dividing an object by one hundred and dividing tenths by ten			
Comparing Fractions				
Compare and order unit fractions, and fractions with the same denominators				
Comparing Decimals				
	compare numbers with the same number of decimal places up to two decimal places			
Rounding Including Decimals				

	round decimals with one decimal place to the nearest whole number	hundred and dividing tenths by ten Recognise and write decimal equivalents of any number of tenths or hundredths	two decimal places.	Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is whole number
Equivalence (Including Fractions, Decimals and Percentages)				
Recognise and show, using diagrams, equivalent fractions with small denominators	recognise and show, using diagrams, families of common equivalent fractions recognise and write decimal equivalents of any number of tenths or hundredths recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, 3/4			
Addition and Subtraction of Fractions				
Add and subtract fractions with the same denominator within one whole (e.g. 5/7 + 1/7 = 6/7)	add and subtract fractions with the same denominator			
Multiplication and Division of Decimals				
	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			
Problem Solving				
Solve problems that involve all of the above	solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is whole number solve simple measure and money problems involving fractions and decimals to two decimal places.			
Ready to Progress Criteria				
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).* ***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.*	***4F–1*** *Reason about the location of mixed numbers in the linear number system* ***4F–2*** *Convert mixed numbers to improper fractions and vice versa.* ***4F–3*** *Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.*			

Measurement

YEAR 3 NC Objectives	YEAR 4 NC Objectives	Autumn Content Y3/4 and Y4 only	Spring Content Y3/4 and Y4 only	Summer Content Y3/4 and Y4 only
Comparing and Estimating				
Compare durations of events, for example to calculate the time taken by particular events or tasks Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight	estimate, compare and calculate different measures, including money in pounds and pence (also included in Measuring)	**Length** Estimate, measure and compare lengths in m, cm, mm. Add, subtract, multiply and divide lengths. Convert between different units of length Measure the perimeter of simple 2D shapes. Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres Find the area of rectilinear shapes by counting squares	**Money** Estimate, compare and calculate money Add and subtract amounts of money to give change Use £ and p in practical contexts.	**Mass, volume and capacity** Measure and compare mass in g, kg. Add and subtract mass. Convert between different units of mass and volume/capacity Measure and compare volume/capacity in l, ml. Add and subtract volume and capacity.
Measuring and Calculating				
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	estimate, compare and calculate different measures, including money in pounds and pence (appears also in Comparing) measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres find the area of rectilinear shapes by counting squares			
Telling the Time				
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, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight	read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Converting) solve problems involving converting from hours to minutes; minutes to seconds; years to mths; weeks to days (appears also in Converting)	**Time 1** Recap months. Know no. of days in each month, year and leap year. Know number of seconds in a minute, minutes in an hour and hours in a day. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days Tell and write the time to the nearest 5 minutes on an analogue clock. Use vocabulary -a.m./p.m., morning, afternoon, noon	**Time 2** Tell and write the time to the nearest 5 minutes on analogue and digital clocks. Use 12 and 24 hour clocks. Read, write, convert time between analogue and digital 12- and 24- hour	**Time 3** Tell and write the time to the nearest minute on analogue and digital clocks including using Roman numerals from I to XII. Use 12 and 24 hour clocks.
Converting				
Know the number of seconds in a minute and the number of days in each month, year and leap year	convert between different units of measure (e.g. kilometre to metre; hour to minute) read, write and convert time between analogue and digital 12 and 24-hour clocks (appears also in Telling the Time) solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days			

	(appears also in Telling the Time)	and midnight.		

Geometry – Properties of Shape				
YEAR 3 NC Objectives	**YEAR 4 NC Objectives**	**Autumn Content Y3/4 and Y4 only**	**Spring Content Y3/4 and Y4 only**	**Summer Content Y3/4 and Y4 only**
Identifying Shapes and their Properties		**Geometry 1**	**Geometry 2**	**Geometry 3**
	identify lines of symmetry in 2-D shapes presented in different orientations	Recap names of 2D and 3D shapes and describe their properties.	Recognise angles as a property of shape or a description of turn.	Describe positions on 2-D grid as coordinates in 1st quadrant
Drawing and Constructing		Compare and classify geometric shapes including quadrilaterals and triangles	Identify right angles.	Describe movements between positions as translations of given unit to left/right and up/down
Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	complete a simple symmetric figure with respect to a specific line of symmetry	Draw 2-D shapes and make 3-D shapes using modelling materials.	Recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn.	Plot specified points and draw sides to complete a given polygon
Comparing and Classifying		Recognise 3D shapes in different orientations.	Identify whether angles are greater than or less than a right angle.	
	compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	Identify lines of symmetry in 2-D shapes	Identify acute and obtuse angles and compare and order angles up to two right angles	
Angles		Complete simple symmetric figure with respect to specific line of symmetry	Identify horizontal and vertical lines and pairs of perpendicular and parallel 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	identify acute and obtuse angles and compare and order angles up to two right angles by size			
Position, direction and movement				
	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			
Ready to Progress Criteria				

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.* ***3G–2*** *Draw polygons by joining marked points, and identify parallel and perpendicular sides.*	***4G–1*** *Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.* ***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* ***4G–3*** *Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry*			

Statistics				
YEAR 3 NC Objectives	**YEAR 4 NC Objectives**	**Autumn Content Y3/4 and Y4 only**	**Spring Content Y3/4 and Y4 only**	**Summer Content Y3/4 and Y4 only**
Interpreting, Constructing and Presenting Data				
Interpret and present data using bar charts, pictograms and tables	interpret and present discrete and continuous data using appropriate graphical methods, incl. bar charts and time graphs		**Statistics 1** Interpret discrete and continuous data using bar charts, pictograms and tables, including timetables Solve one-step questions using information presented. Solve comparison, sum and difference problems presented in bar charts, pictograms, tables and other graphs	**Statistics 2** Present discrete and continuous data using bar charts, pictograms and tables, including timetables Solve one-step and two-step questions using information presented. Solve comparison, sum and difference problems presented in bar charts, pictograms, tables and other graphs
Solving Problems				
Solve one-step and two step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts, pictograms, tables	solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.			