Forest Class 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, 5s, 10s, 50s and 100s. Mental strategies Related facts	
Aut 2	**Number – Fractions 1** Fractions as numbers Unit & non unit fractions of shapes & quantities Add & subtract fractions		**Number - Addition and Subtraction 2** Mental strategies Complements to 100 Problems using most efficient method		**Geometry – Properties of Shape 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 and partition numbers	**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 and 8s, 3, 4, 8 x and ÷ facts Written strategies Missing number problems & problems in context		
Spr 2	**Number – Fractions 2** Unit & non unit fractions of quantities Equivalent Fractions Compare and order fractions Tenths		**Geometry – Properties of Shape 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	**Measures – Time 3** Time to 5 minutes – analogue and digital 12 and 24 hour times Compare duration of events	**Number - Addition and Subtraction 4** Column + and – Estimating answers Use of inverse to check answers		**Measures – Mass, volume and capacity** Measure and compare Add and subtract	**Number – Multiplication and Division 3** 3, 4, 8 x and ÷ facts Written strategies Problems in context	**Statistics 2** Presenting tables, pictograms, bar charts. Solving two step problems.	
Sum 2	**Number - Place Value 3** Count, compare, order numbers	**Number – Fractions 3** Equivalent Fractions Compare and order fractions Tenths Fractions on number line		**Geometry – Properties of Shape 3** Draw and make shapes Angles and lines in shapes	**Measures – Time 4** Time to nearest minute – analogue and digital 12 and 24 hour times	**Assess & Consolidate**	

Number and Place Value

YEAR 3 NC Objectives	Autumn Content Year 3	Spring Content Year 3	Summer Content Year 3
Counting	**Place Value 1**	**Place Value 2**	**Place Value 3**
Count from 0 in multiples of 4, 8, 50 and 100	Count from 0 in multiples of 50 and 100.	Count from 0 in multiples of 4 and 8.	Count from 0 in multiples of 4, 8, 50 and 100.
Find 10 or 100 more or less than a given number			
Comparing Numbers	Read and write numbers to 1000 in numerals and words.	Order a set of numbers up to 1000.	Place numbers to 1000 on marked and unmarked number lines, reasoning about their location
Compare and order numbers up to 1 000			(*number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts*).
Identifying, Representing and Estimating Numbers	Hundreds, Tens and Ones - identify and represent numbers up to 1000 using different representations.	Partition 3 digit numbers – compose and decompose numbers using standard and non-standard partitioning.	
Identify, represent and estimate numbers using different representations			Compare and order numbers to 1000 using
Reading and Writing Numbers	Partition 3 digit numbers into hundreds, tens and ones in different ways.	Read scales and place numbers to 1000 on number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.	<, > and = signs.
Read and write numbers up to 1000 in numerals and in words			Solve place value problems.
Understanding Place Value	Find 1, 10 or 100 more or less than a number to 1000.	(*Divide 100 into 2, 4, 5 and 10 equal parts*).	
Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)		Begin to reason about their location.	
Problem Solving	Compare two numbers/quantities to 1000. Identify greatest/least. Recap <, > and = symbols.		
Use place value and number facts to solve problems			
Solve number problems and practical problems involving these ideas.			
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*			
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*			

Addition and Subtraction			
YEAR 3 NC Objectives	Autumn Content Year 3	Spring Content Year 3	Summer Content Year 3
Mental Calculation	**Addition and Subtraction 1**	**Addition and Subtraction 3**	**Addition and Subtraction 4**
Add and subtract numbers mentally, including: * a three-digit number and ones * a three-digit number and tens * a three-digit number and hundreds	Secure fluency in addition and subtraction facts to 20 particularly those that bridge 10 e.g. 7 + 5, 12 – 5.	Add and subtract up to 3 digits using column addition and subtraction.	Add and subtract up to 3 digits using column addition and subtraction, estimating answers first.
Written Methods	Scale number facts by 10 e.g. 7 + 5 = 12, 12 -5 = 7 so 70 + 50 = 120 120-50 = 70.	Solve missing number problems using part, part whole (use the inverse)	Use inverse to check answers.
Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction			Solve missing number problems using the inverse.
Inverse Operations, Estimating and Checking Answers	Fact families – related addition and subtraction facts.		
Estimate the answer to a calculation and use inverse operations to check answers	Understand that addition is commutative but subtraction is not.		
Problem Solving	Understand inverse relationship between + and -.		
Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	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).		
Ready to Progress Criteria			
3NF–1 *Secure fluency in addition and subtraction facts that bridge 10, through continued practice.*	Mentally add and subtract a 3 digit number and tens.		
3NF–3 *Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10)*	Mentally add and subtract a 3 digit number and hundreds.		
3AS–1 Calculate complements to 100	**Addition and Subtraction 2**		
3AS–2 *Add and subtract up to three-digit numbers using columnar methods.*	Add 2 two or three digit numbers using partitioning and subtract 2 two or three digit numbers by counting on to find the difference.		
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*			

	Expanded column method for + and -. Calculate complements to 100. Solve addition and subtraction problems using concrete objects, pictorial representations, jottings and mental methods taught.		

Multiplication and Division			
YEAR 3 NC Objectives	**Autumn Content** **Year 3**	**Spring Content** **Year 3**	**Summer Content** **Year 3**
Multiplication and Division Facts	**Multiplication and Division 1**	**Multiplication and Division 2**	**Multiplication and Division 3**
Count from 0 in multiples of 4, 8, 50 and 100 Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	Count from 0 in multiples of 2, 5, 10, 50 and 100.	Count from 0 in multiples of 3, 4 and 8.	Multiplication and division facts for the 3, 4 and 8 x tables
Mental Calculation	Mental strategies for multiplication and division – using concrete apparatus and progressing to pictorial/abstract. (For x - arrays, skip counting, doubling, repeated addition, equal groups, number line.)	Multiplication and division facts for the 3, 4 and 8 x tables Missing number problems. Multiplying by a multiple of 10 e.g. 4 x 30.	Multiply a two-digit number by one digit number using the grid method. Division on a number line – chunking for larger numbers.
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			
Written Calculation	For ÷ - sharing, grouping, using inverse, halving, number line)	Multiply a two-digit number by one digit number using the grid method.	x and ÷ problems in context. Correspondence problems in which m objects are connected to n objects (for example, 3 hats and 4 coats, how many different outfits?)
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	Show that multiplication of two numbers can be done in any order (commutative) but division cannot.	Division on a number line – chunking for larger numbers.	
Problem Solving	Fact families – related x and ÷ facts.	x and ÷ problems in context.	
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			
Ready to Progress Criteria	Scale number facts by 10 e.g. 3 x 5 = 15, 15 ÷ 5 = 3 so 30 x 5 = 150, 150 ÷ 5 = 30.		
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 facts to solve contextual problems with different structures, including quotative and partitive division			

Fractions

YEAR 3 NC Objectives	Autumn Content Year 3	Spring Content Year 3	Summer Content Year 3
Counting in Fractional Steps	**Fractions 1**	**Fractions 2**	**Fractions 2**
Count up and down in tenths	Recognise and use unit and non-unit fractions as numbers.	Find unit and non unit fractions of a discrete set of objects.	Recognise equivalent fractions.
Recognising Fractions			Compare and order unit fractions and fractions with the same denominator.
Recognise, find, write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	Find unit fractions of quantities using known division facts (x tables fluency).	Recognise equivalent fractions using diagrams.	
Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one–digit numbers or quantities by 10.	Find unit and non unit fractions of shapes and a discrete set of objects.	Compare and order unit fractions,	Count up and down in tenths. Begin to understand the decimal form of tenths e.g. 0.1 = 1/10, 0.6. = 6/10 etc.
Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators		Compare and order fractions with the same denominator.	
Comparing Fractions	Add and subtract fractions with the same denominator.	Count up and down in tenths.	Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one–digit numbers or quantities by 10.
Compare and order unit fractions, and fractions with the same denominators		Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one–digit numbers or quantities by 10.	
Equivalence			Reason about the location of any fraction within 1 in the linear number system.
Recognise and show, using diagrams, equivalent fractions with small denominators			
Addition and Subtraction of Fractions		Solve problems.	Solve problems.
Add and subtract fractions with the same denominator within one whole (e.g. 5/7 + 1/7 = 6/7)			
Problem Solving			
Solve problems that involve all of the above			
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.			

Measurement

YEAR 3 NC Objectives	Autumn Content Year 3	Spring Content Year 3	Summer Content Year 3
Comparing and Estimating	**Length**	**Money**	**Mass, volume and capacity**
Compare durations of events, for example to calculate the time taken by particular events or tasks	Measure and compare lengths in m, cm, mm.	Add and subtract amounts of money to give change.	Measure and compare mass in g, kg.
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	Add and subtract lengths.	Use £ and p in practical contexts.	Add and subtract mass.
Measuring and Calculating	Measure the perimeter of simple 2D shapes.		Measure and compare volume/capacity in l, ml.
Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)			Add and subtract volume and capacity.
Measure the perimeter of simple 2-D shapes			
Add and subtract amounts of money to give change, using both £ and p in practical contexts	**Time 1**	**Time 2**	**Time 3**
Telling the Time	Recap months. Know no. of days in each month, year and leap year.	Tell and write the time to the nearest 5 minutes on analogue and digital clocks.	Tell and write the time to the nearest 5 minutes on analogue and digital clocks including using Roman numerals from I to XII.
Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks	Know number of seconds in a minute, minutes in an hour and hours in a day.	Use 12 and 24 hour clocks.	Use 12 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	Tell and write the time to the nearest 5 minutes on an analogue clock.		Compare durations of events.
Converting			**Time 4**
Know the number of seconds in a minute and the number of days in each month, year and leap year	Use vocabulary -a.m./p.m., morning, afternoon, noon and midnight.		Read time with increasing accuracy to the nearest minute.
			Use 12 and 24 hour clocks.

Geometry – Properties of Shape

YEAR 3 NC Objectives	Autumn Content Year 3	Spring Content Year 3	Summer Content Year 3
Drawing and Constructing	**Geometry 1**	**Geometry 2**	**Geometry 3**
Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them			

	Recap names of 2D shapes and describe their properties.	Recognise angles as a property of shape or a description of turn.	Draw 2-D shapes and make 3-D shapes using modelling materials.
Angles			
Recognise angles as a property of shape or a description of a turn	Recognise angles as a property of shape or a description of turn.	Identify right angles.	Identify right angles, acute and obtuse angles, perpendicular and parallel lines in shapes.
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 right angles in 2D shapes.	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	Draw 2D shapes.	Identify whether angles are greater than or less than a right angle	
Identify horizontal and vertical lines and pairs of perpendicular and parallel lines			
Ready to Progress Criteria	Recap names of 3D shapes and describe their properties.		
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.	Make 3D shapes using modelling materials.	Horizontal and vertical lines.	
3G–2 Draw polygons by joining marked points, and identify parallel and perpendicular sides.	Recognise 3D shapes in different orientations.	Perpendicular and parallel lines.	

Statistics			
YEAR 3 NC Objectives	**Autumn Content** **Year 3**	**Spring Content** **Year 3**	**Summer Content** **Year 3**
Interpreting, Constructing and Presenting Data		**Statistics 1**	**Statistics 2**
Interpret and present data using bar charts, pictograms and tables		Interpret data using bar charts, pictograms and tables.	Present data using bar charts, pictograms and tables.
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 one-step questions using information presented.	Solve one-step and two step questions using information presented in scaled bar charts, pictograms, tables.