Nursery

Autumn	• I can say numbers in order, some of which are in the right order (ordinality) • I use some number names and number language within play • I can take part in finger rhymes with numbers. • I can choose puzzle pieces and try to fit them in • I can make simple constructions • I can recognise that two objects have the same shape • I can remember my way around familiar environments • I can respond to and use language of position and direction • I can recall a sequence of events in everyday life and stories	• I can take or give two or three objects from a group • I can notice numerals • I can compare and recognise changes in numbers of things, using words like more, lots or 'same' • I can count on their fingers. • I can predict, move and rotate objects to fit the space or create the shape they would like • I enjoy partitioning and combining shapes to make new shapes with 2D and 3D shapes • I can join in and anticipates repeated sound and action patterns
Spring	• I can explores using a range of their own marks and signs to which they ascribe mathematical meanings • I can talk about and identify the patterns around me. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. • I can create my own spatial patterns showing some organisation or regularity • I can explores and add to simple linear patterns of two or three repeating items, e.g. stick, leaf (AB) or stick, leaf, stone (ABC)	• I can subitises one, two and three objects (without counting) • I can respond to both informal language and common shape names • I show awareness of shape similarities and differences between objects
Summer	• I can points or touch each item, saying one number for each item, using the stable order of 1,2,3,4,5. • I can count up to five items, recognising that the last number said represents the total counted so far (cardinal principle) • I am beginning to recognise numerals 0 to 10 • I am beginning to use understanding of number to solve practical problems in play and meaningful activities	• I can links numerals with amounts up to 5 and maybe beyond • Composition • I can separate a group of three or four objects in different ways, beginning to recognise that the total is still the same • I know that numbers are made up (composed) of smaller numbers • I can recognise that each counting number is one more than the one before • I can compare amounts, saying 'lots', 'more' or 'same'. • I can explore differences in size, length, weight and capacity

Reception

Autumn	- I recognise that each counting number is one more than the one before - I can continue, copy and create repeating patterns. - I notice and correct an error in a repeating pattern - I can compare length, weight and capacity. - I can compare and recognise changes in numbers of things, using words like more, lots or 'same' - I can discuss routes and locations, using words like 'in front of' and 'behind'.	- I can point or touch each item, saying one number for each item, using the stable order of 1,2,3,4,5. - I can link the number symbol (numeral) with its cardinal number value. - I can subitise 1,2 and 3 objects - I can count out up to five items, recognising that the last number said represents the total counted so far (cardinal principle) - I can link numerals with amounts up to 5 and maybe beyond. - I can solve real world mathematical problems with numbers up to 5. - I understand the 'one more than/one less than' relationship between consecutive numbers. - I can talk about and explore 2D shapes (for example, circles, rectangles, triangles) using informal and mathematical language: 'sides'; 'straight', 'flat', 'round'. - I can select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. - I am increasingly able to order and sequence events using everyday language related to time - I am beginning to experience measuring time with timers and calendars
Spring	- I can use number names and symbols when comparing numbers, showing interest in large numbers - I know that numbers are made up (composed) of smaller numbers - I can explore and work out mathematical problems, using signs and strategies of their own choice, including (when appropriate) standard numerals, tallies and "+" or "-" - I enjoy tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy	- I can count out up to 10 objects from a larger group. - I can count objects, actions and sounds. - I can count beyond ten - I can compose and decompose shapes and recognise a shape can have other shapes within it, just as numbers can. - I can select, rotate and manipulate shapes in order to develop spatial reasoning skills. Patterns - I can turn and flip objects in order to make shapes fit and create models - I can use my own ideas to make models of increasing complexity - I am familiar with measuring tools in everyday experiences and play - I am increasingly able to order and sequence events using everyday language related to time
Summer	- I can Subitise (recognise quantities without counting) up to 5 - I can verbally count beyond 20, recognising the pattern of the counting system	- I have a deep understanding of number to 10, including the composition of each number - I can 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.

		• I can explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; |

Year 1

Autumn	**Number - Place value** • I can read and write numbers in numerals to 20. • I can read scales in divisions of ones. • I can partition a two-digit number within 20 into tens and ones and demonstrate an understanding of place value using resources. • I can partition two digit numbers into tens and ones, explaining my thinking using resources		**Number - Addition and subtraction (within 10)** • I can add and subtract one digit numbers and explain my method in pictures or by using resources (part whole models) • I can recall at least four of the six number bonds to 10 and reason about the associated facts.		**Geometry – shape** • Rectangle, square, circle, triangle, cuboids (including cubes), cylinders, cones, pyramids, spheres. • I can recognise, name and sort 2D and 3D shapes (listed above).
Spring	**Number – place value (within 20)** **This is new to the scheme of learning.** **If year 1 cohort is strong, would you group this with place value to 10 or 50?**	**Number – addition and subtraction (within 20)** • I can add and subtract one digit numbers and explain my method verbally, in pictures or by using resources. • I can recall all the number bonds to and within 10 and use these to reason with.	**Number – place value (within 50)** • I can read and write numbers to 50 in numerals. • I can partition a two-digit number within 50 into tens and ones and demonstrate an understanding of place value (using resources for support where needed). • I can read scales in divisions of ones and tens. • I can partition a two-digit number into different combinations of tens and ones and explain my thinking by using resources or pictures.	**Measurement – length and height** • I can measure and begin to record lengths and heights using non-standard units of measurement and cm. • I can compare, describe and solve practical problems for length and height (longer/shorter).	**Measurement – mass and volume** • I can measure and begin to record mass/weight, capacity and volume. • I can compare, describe and solve practical problems for mass/weight (heavier than/lighter than), capacity and volume (full/empty, half, half full, quarter full).
Summer	**Number – multiplication and division**	**Number – fractions** • I can recognise, find and name a half as one	**Geometry – position and direction**	**Number – place value (within 100)**	**Measurement – money**	**Measurement – time**

• I can count in tens to 100. I can group and share using resources and *pictorial* representations (in twos, fives and tens). • I can identify equal and unequal groups.	of two equal parts of an object, shape or quantity. • I can identify ¼ of a number or shape and know that all must be equal parts of the whole	• I can describe whole and half turns. I can describe position, direction and movement including whole, half, quarter turns	• I can read and write numbers in numerals within 100. • I can partition a two-digit number within 100 into tens and ones and demonstrate an understanding of place value (practically). • I can read scales in divisions of ones and tens (including having exposure to twos and fives). • I can partition a two-digit number into different combinations of tens and ones, explain my thinking and record using part-whole models.	• I know the value of different coins (1p, 2p, 5p and 10p). • I can use different coins to make the same amount within 10p.	• I can read the time on a clock to the hour. • I can read the time on a clock to half an hour. • I know the days of the weeks, months of the year

Year 2

Autumn	**Number – place value** • I can read and write numbers in numerals and words to 100. • I can partition a two-digit number within 100 into tens and ones and demonstrate an understanding of place value. • I can count in steps of 2, 3, ad 5 from 0, and in 10s from any number forward and backward • I can partition most two-digit numbers into different combinations of tens and ones, explaining my thinking.	**Number – addition and subtraction** • I can add and subtract one and two digit numbers without grouping and explain my method verbally, in pictures or by using resources. • I can recall all the number bonds to and within 10 and begin to calculate bonds to and within 20, recognising other associated additive relationships. • I know that addiction is commutative but subtraction is not • I can use the inverse relationship between addition and subtraction to check calculations and solve problems.	**Geometry – shape** • I can indentidy and describe the properties of 2D shapes (number of sides and line symmetry) • I can identify and describe the properties of 3D shapes (number of edges, vertices and faces) • I can identify 2D shapes on the surface of 3D shapes (for example, a circle of a cylinder) • I can compare and sort common 2D and 3D shaoes and every day objects	
Spring	**Measurement – money** • I can recognize and use symbols for pounds (£) and pence (p) and combine amounts to make a value • I can find different combinations of coins that equal the same amount of money • I can solve problems in a practical context involving addition and subtraction of money of the same unit, including giving change.	**Number – multiplication and division** • I can recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables • I can recognise odd and even numbers • I can calculate mathematical statements for multiplication and division and write them using the multiplication	**Measurement – length and height** • I can choose and use appropriate standard units to estimate and measure length/height in any direction • I can compare and order heights using <, > and =	**Measurement – mass, capacity and temperature** • I can choose and use standrand units to estimate mass (kg/g), temperature (°C), capacity (litres/ml) to the nearest appropriate unit. • I can compare and order mass, volume/capacity and record the result using <, > and =

		(x), division (÷) and equals (=) signs. • I know that multiplication is commutative but division is not • I can solve problems involving multiplication and division (using materials, arrays, repeated addition, mental methods, multiplication and division facts)			
Summer	**Number – fractions** • I can recognise, find, name and write fractions 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects of quantity. • I can write simple fractions. For example ½ of 6 =3 • I can recognise the equivalanece of 2/4 and ½	**Measurement – time** • I can compare and sequence intervals of time • I can tell and write the time to five minutes, including quarter past/to the hours • I can draw the hands on a clock face to the show the time • I know there are 60 minutes in an hour and 24 hours in 1 day.	**Statistics** • I can interpret and construct pictograms, tally charts, block diagrams and tables • I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity • I can ask and answer questions about totaling and comparing categorical data	**Geometry – position and direction** • I can order and arrange combinations of mathmatival objects in patterns and sequences • I can use mathematical vocabulary to describe position, direction and movement, including movement in a striahgt line • I can distinguish between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anticlockwise)

Year 3

Autumn	**Number – place value** • I can find 1, 10 or 100 more or less than a given number. • I can recognise the place value of each digit in a three-digit number (hundreds, tens, ones). • I can compare and order numbers up to 1000.	**Number – addition and subtraction** • I can add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds. • I can add and subtract with up to three digits, using formal written methods of column addition and subtraction crossing 10 and 100 (exchanging). • I can estimate the answer to a calculation and use the inverse operation to check answers.		**Number – multiplication and division** • I can count from 0 in multiples of 50 and 100. • I can recall and use multiplication and division facts for the 3 times table. • I can write and calculate mathematical statements for multiplication and division using the multiplication tables I know. (10s,2s,5s,3s).
Spring	**Number – multiplication and division** • I can count from 0 in multiples of 50 and 100 to 1000. • I can recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. • I can write and calculate mathematical statements for multiplication and division using the multiplication tables I know (including for two-digit times one-digit numbers). • I can write and calculate mathematical statements for multiplication and division using the multiplication tables I know (including for two-digit times one-digit numbers) with exchange.	**Measurement – length and perimeter** • I can find the equivalent length in m, cm and mm. • I can measure and compare length (m/cm/mm). • I can add and subtract length. • I can measure the perimeter of simple 2D shapes.	**Number – fractions** • I can count up and down in tenths and can recognise that tenths arise from dividing an object into ten equal parts and in dividing one-digit numbers or quantities by ten. • I can recognise and use fractions and numbers (unit fractions and non-unit fractions). • I can recognise, find and write	**Measurement – mass and capacity** • I can find the equivalent mass in kg/g. • I can measure and compare mass (kg/g). • I can add and subtract mass. • I can find the equivalent volume/capacity in ml/l. • I can measure and compare volume/capacity (ml/l). • I can add and subtract volume and capacity.

			fractions of a discrete set of objects (unit and non-unit fractions)		
Summer	**Number – fractions** • I can recognise and show equivalent fractions with small denominators (using diagrams). • I can compare and order unit fractions and fractions with the same denominator. • I can add and subtract fractions with the same denominator within one whole (5/7 + 1/7 = 6/7).	**Measurement – money** • I can convert pounds and pence. • I can add and subtract amounts of money to give change, using both £ and p, in practical contexts.	**Measurement – time** • I can estimate and read time with increasing accuracy to 5 minute intervals. • I can tell and write time from an analogue clock using the 12-hour and 24-hour clock. • I can record and compare time in terms of seconds, minutes and hours. • I know the number of seconds in a minute, number of days in each month, year, leap year. • I can compare the duration of events.	**Geometry – shape** • I can recognise angles as a property of shape OR a description of a turn (e.g. two right angles = a half turn). • I can identify right angles and angles that are greater or less than a right angle • I can identify horizontal, vertical, parallel and perpendicular lines. • I can draw 2D shapes and construct 3D shapes. • I can recognise 3D shapes in different orientations and describe them.	**Statistics** • I can interpret and present data using: bar charts, pictograms and tables. • I can solve one-step and two-step questions using information presented in scaled bar charts, pictograms and tables. • I can find the difference between two numbers plotted on a bar chart, pictogram or table. e.g. How many more children chose…. than ….

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Year 4

| Autumn | **Number – place value**
 • I can find 1, 10, 100 and 1000 more or less than a given number.
 • I can recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, ones).
 • I can compare and order numbers beyond 1000.
 • I can round numbers to the nearest 10, 100 or 1000.
 • I can count backwards through zero to include negative numbers. | **Number – addition and subtraction**
 • I can add and subtract numbers with up to four digits, using formal written methods of column addition and subtraction.
 • I can add and subtract numbers with up to four digits, using formal written methods of column addition and subtraction with exchange in ones, tens or hundreds.
 • I can estimate the answer to a calculation and use the inverse operation to check answers.
 • I can solve addition and subtraction two-step problems in context, deciding which operations and methods to use. | | **Measurement – area**
 • I can find the area of rectilinear shapes by counting squares. | **Number – multiplication and division**
 • I can count in multiples of 6, 7, 9, 25 and 1000.
 • I can recall and use multiplication and division facts for the 6, 9 and 7 multiplication tables.
 • I can 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 |
| Spring | **Number – multiplication and division**
 • I can recall and use multiplication and division facts for multiplication tables up to 12 x 12.
 • I can recognise and use factor pairs and commutativity in mental calculations.
 • I can multiply two-digit and three-digit numbers by a one-digit number using a formal written layout. | **Measurement – length and perimeter**
 • I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. | **Number – fractions**
 • I can recognise and show families of common equivalent fractions (using diagrams).
 • I can count up and down in hundredths; recognising that hundredths arise when dividing an object by one hundred and dividing tenths by ten. | | **Number – decimals**
 • I can recognise and write decimal equivalents of any number of tenths or hundredths.
 • I can divide a one or two-digit number by ten or one hundred and identify the |

	• I can solve problems involving multiplying and adding, including: using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and correspondence problems.	• I can convert between different units of measure (for example, kilometres to metres).	• I can calculate quantities from fractions. • I can use fractions to divide quantities (including non-unit fractions where the answer is a whole number) • I can add and subtract fractions with the same denominator.			answer as ones, tenths and hundredths.
Summer	**Number – decimals** • I can compare numbers with the same number of decimal places up to two decimal places. • I can round decimals with one decimal place to the nearest whole number. • I can write decimal equivalents for ¼, ½ and ¾	**Measurement – money** • I can estimate, compare and calculate using money in pounds and pence. • I can solve simple money problems using decimals to two decimal places.	**Measurement – time** • I can read, write and convert time between analogue and digital 12 and 24-hour clocks. • I can solve problems involving converting from: hours to minutes; minutes to seconds; years to months; weeks to days	**Geometry – shape** • I can identify acute and obtuse angles and compare and order angles, including right angles, by size. • I can compare and classify geometric shapes (including quadrilaterals and triangles) based on their properties and sizes. • I can identify lines of symmetry in 2D shapes presented in a variety of orientations. • I can complete a simple symmetric figure	**Statistics** • I can interpret and present discrete and continuous data using the appropriate method including bar charts and time graphs. • I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and line graphs.	**Geometry – position and direction** • I can describe position on a 2D grid as coordinates. • I can plot points and draw sides to complete polygons. • I can describe movement between positions as translations of a given unit to the left/right and up/down.

Year 5

Autumn	Number - Place value	Number - Addition and subtraction	Number - Multiplication and division	Number - Fractions A
	• I can read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit. • I can count forwards and backwards in steps of powers of 10 for any given number up to 1,000,000. • I can interpret negative numbers in context and can count forwards and backwards with positive and negative numbers through zero. • I can round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000. • Read Roman numerals up to 1,000 and recognise different years written in Roman numerals.	• I can add and subtract numbers with more than four digits, using formal written methods of columnar addition and subtraction. • I can use rounding to check the answer to a calculation and determine, in the context of the problem, levels of accuracy. • I can solve addition and subtraction multi-step problems in context, deciding which operations and methods to use. • I can add and subtract numbers mentally with increasingly large numbers.	• I can identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers. • I can understand and use the vocabulary of prime factors, prime and composite (non-prime) numbers. • I can establish whether a number up to 100 is prime and can recall prime numbers up to 19. • I can recognise and use square and cubed numbers and the notation for squared and cubed. • I can solve problems involving multiplication and division using their knowledge of factors, multiples, squares and cubes.	• I can compare and order fractions whose denominators are multiples of the same number. • I can identify, name and write equivalent fractions of a given fraction, represented visually (including tenths and hundredths). • I can recognise mixed numbers and improper fractions and can convert from one form to the other and write mathematical statements >1 as a mixed number (e.g. 2/5 + 4/5 = 6/5 = 1 1/5).

Spring	Number - Multiplication and division	Number - Fractions	Number - Decimals and percentages	Measurement - Perimeter and area	Statistics
	• I can multiply and divide numbers mentally drawing upon known facts.	• I can multiply proper fractions and	• I can read, write, order and compare numbers with up to three decimal places.	• I can measure and calculate the	• I can solve comparison, sum and

• I can multiply numbers up to a four-digit by a one or two-digit number using a more formal written method, including long multiplication for two-digit numbers. I can divide numbers up to four digits by a one-digit number using the formal written method of short division and interpret remainders appropriately. • I can solve problems involving addition, subtraction, multiplication and division and a combination of these including understanding the meaning of the equals sign.	mixed numbers by whole numbers, supported by materials and diagrams. • I can find a fraction of an amount and a quantity • I can use fractions as operators	• I can read and write decimal numbers as fractions e.g. 0.71 is 71/100. • I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. • I can round decimals with two decimal places to the nearest whole number and to one decimal place. • I can recognise the percent symbol (%) and understand that percent relates to 'number of parts per 100.' • I can solve problems which require knowing percentage and decimal equivalents of ½ ¼ 1/5 2/5 4/5	perimeter of composite rectilinear figure in centimetres and metres. • I can calculate and compare the area of rectangles (including squares) using: standard units, square centimetres and square metres. • I can estimate the area of irregular shapes.	difference problems using information from a line graph. • I can complete, read and interpret information from graphs and tables including timetables.

Summer	**Geometry - Shape** • I can identify 3D shapes • I can measure angles in degrees and estimate angles • I can draw angles and know the angles of a full turn, half turn, quarter turn • I can use the properties of rectangles to deduce facts and find missing lengths and angles • I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles	**Geometry - Position and direction** • I can identify, describe and represent the position of a shape following a reflection or translation. • I can reflect or translate a shape and understand that the shape has not changed.	**Number - Decimals** • I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. • I can solve problems involving number up to three decimal places. • I can use all for number operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation, including scaling.	• **Number - Negative numbers** • I can interpret negative numbers in context • I can count forwards and backwards with negative and positive whole numbers, including through 0	**Measurement - Converting units** • I can convert between different units of metric measure (e.g km and m, cm and m, cm and mm, g and kg, ml and l). • I use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. • I can solve problems involving converting between units of time.	**Measurement - Volume** • I can estimate volume (e.g using 1cm^3 blocks to build cuboids) and capacity (e.g using water). • I can use all four operations to solve problems involving measure (for example: length, mass, volume and money) using

					decimal notation including scaling.

Year 6

Autumn	**Number – place value** • I can read, write, order and compare numbers to at least 10,000,000 and determine the value of each digit. • I can solve calculations using negative numbers in context, and calculate intervals across zero. • I can round any whole number up to a required degree of accuracy.	**Number – four operations** • I can multiply multi-digit numbers up to 4 digits by a one-digit whole number using the formal written method of long multiplication. • I can divide numbers up to 4 digits by a one-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders. • I can perform mental calculations, including calculations with mixed operations and large numbers. • I can identify common factors, common multiples and prime numbers. • I can use my knowledge of the order of operations to carry out calculations involving the four operations.	**Number – fractions A**	**Number – fractions B**	**Measurement – converting units** • I can convert units of measure, using decimal notation up to 3 decimal places • I can use, read, write and convert between standard units • I can convert measurements of length, mass, volume and time from a smaller unit of measure to a larger unit • I can convert between miles and kilometers	
Spring	**Number – Ratio** • I can solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer muliplcation and division facts • I can solve problems invling the calculation of	**Number – algebra** • I can use simile formulae • I can generate and describe linear number sequences • I can express missing number problems algebraically	**Number – decimals**	**Number – fractions, decimals and percentages**	**Measurement – area, perimeter and volume** • I know that shapes with the same area can have different perimeters and vice verca • I can recognise when it is possible to use formulae for area and volume of shapes	**Statistics** • I can interpret and construct pie charts and line graphs • I can calculate

	percentages and the use of percentages for comparison • I can solve problems involving similar shapes where the scale factor is known or can be found • I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.	• I can find pairs of numbers that satisfy an equation with 2 unknowns • I can enumerate possibilities of combinations of 2 variables			• I can calculate the area of parallelograms and triangles • I can calculate, estimate and compare volume of cubes and cuboids using standard units, including cubics (cm3 and m3)	and interpret the mean as an average
Summer	**Geometry – shape** • I can draw 2D shapes using given dimensions and angels • I can recognise, describe and build 3D shapes, including making nets • I can compare and classify shapes based on their properties • I can find unknown angles in triangles, quadrilaterals and polygons • Illustrate and name parts of a circle – radius, diameter and circumference • I know that angles that meet at a point, are on a straight line or are opposite	**Geometry – position and direction** • I can describe positions of the full coordinate grid (4 quadrants) • I can draw and translate shapes on the coordinate plane and reflect them in the axes	**Themed projects, consolidation and problem solving** If you have anything in particular planned for this time, please add it in. the more detail, the better.		