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| **PLACE VALUE** | **Reception** | **Year 1** | **Year 2** |
| **Place Value:** **Counting****Represent****Use PV and Compare****Problems and Rounding** | * Numbers to 5
* One, two, three
* Four
* Five
* Numbers to 10
* Counting to 6,7,and 8
* Counting to 9 and 10
* Numbers to 20

identify and represent numbers up to 20 in different ways* Comparing groups
* Comparing quantities of identical objects
* Comparing quantities of non-identical objects
* Comparing groups up to 10
 | AutumnSpringSummerAllAutumnSpring | * Count to and across 100, forwards and backwards, beginning with 0 or 1, from any given number.
* Count numbers to 100 in numerals, count in multiples of twos, fives and tens
* Identify and represent numbers using objects and pictorial representations.
* Read and write numbers to 100 in numerals
* Read and write numbers from 1 to 20 in numerals and in words.
* Given a number, identify one more and one less
 | Autumn 1, 4Spring 2Summer 4 | * Count in steps of 2,3, and 5 from 0, and in tens from any number, forward and backward
* Read and write numbers to at least 100 in numerals and in words.
* Identify, represent and estimate numbers using different representations including the number line.
* Recognise the place value of each digit in a two-digit number (tens, ones)
* Compare and order numbers from 0 up to 100; use > < and = signs
* Use Place value and number facts to solve problems
 | Autumn1 |
| **Vocab** | number, digit, one-twenty, teen numbers, ones, tens, thirty, forty, fifty, count, more, less, fewer, same, guess, estimate, check, number line, order, compare, amount, groups, different | sort, count, represent, objects, one more/less, order, ordinal, counting in 2s 5s, equal, largest, smallest, biggest, greatest, least, most equal to, forwards, backwards, numerals, tens, ones, compare groups/numbers | ones, tens, hundreds, numerals, words, digit, part whole, count, greater than >, less than <, equal, compare, order, fewer |
| **Ready to progress criteria** | \* Begin to develop a sense of the number system by verbally counting forward to and beyond 20, pausing at each multiple of 10\* play games that involve moving along a numbered track, and understand that larger numbers are further along the track. | 1NPV-1: Count within 100, forwards and backwards, starting with any number.1NPV-2: Reason about the location of numbers to 20 within the linear number system, including comparing using < > and = | 2NPV-1: Recognise the PV of each digit in 2 digit numbers and compose and decompose 2 digit numbers using standard and non-standard partitioning2NPV-2: Reason about the location of any 2 digit number in the linear number system including the previous and next multiple of 10 |
| **Key skills- ELGs/TAF** | ELG- Number* Have a deep understanding of number to 10, including the composition of each number
* Subitise up to 5

ELG- Numerical Patterns* Verbally count beyond 20, recognising the pattern of the counting system.
* compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as another quantity
 |  | WT- read and write numbers in numerals to 100WT- partition a 2digit number into T and O demonstrating an understanding of PV (resources)EXP- partition any 2 digit number into different combinations of T and O, explaining their thinking verbally/pictures/resources |

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| **ADDITION & SUBTRACTION** | **Reception** | **Year 1** | **Year 2** |
| **Addition & Subtraction:****Recall, Represent, Use****Calculations** **Solve Problems** | * Sorting into groups
* Change within 5

-One more, one less* Numbers to 5
* Introducing zero
* Number bonds to 5
* Addition to 10

-Combining two groups to find the whole.-Number bonds to 10 – ten frame-Number bonds to 10 – part whole model* Count on and back

-Adding by counting on-Taking away by counting back | AutumnAutumnSpringSummer | * Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.
* Represent and use number bonds and related subtraction facts within 20
* Add and subtract one digit and two digit numbers to 20 including zero
* Solve one step problems that involve addition and subtraction using concrete objects and pictorial representations and missing number problems such as
* 7=🞏 - 9
 | Autumn 2Spring 1 | * Recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100
* Show that addition of two numbers can be done in any order (Commutative) and subtraction of one number from another cannot.
* Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.
* Add and subtract numbers using concrete objects, pictorial representations and mentally including:
* A two digit number and ones
* A two digit number and tens
* Two two digit numbers
* Adding three one digit numbers
* Solve problems with addition and subtraction;

-Using concrete objects and pictorial representations including those involving numbers quantities and measures-applying their increasing knowledge of metal and written methods | Autumn 2 |
| **Vocab** | more, less, sort, group, answer, one more/less, add, plus, take away, subtract, total, altogether, equals, tens frame, part, whole, count on/back | part whole model, find a part, addition, add, plus, more, greater, altogether adding more, number bonds, subtraction, subtract, take away, left, less, fewer, difference, compare, count on/back, fact families | **addition:** add, plus, more, total, sum **subtraction:** takeaway,subtract, minus, differencewhole, part, partition, number bonds, more, less, commutative, inverse, fact family, bar model |
| **Ready to progress criteria** | \* Begin to experience partitioning and combining numbers within 10\* understand the cardinal value of number words, for example understanding that ‘four’ relates to 4 objects\* Subitise for up to 5 items\* Automatically show a given number using fingers\* Devise and record number stories, using pictures, numbers and symbols (such as arrows) | 1NF-1: Develop fluency in + and – facts within 101AS-1: Compose numbers to 10 from 2 parts and partition numbers to 10 into parts including recognising odd and even numbers1AS-2: read, write and interpret equations containing + , - and = symbols, and relate additive expressions to real life contexts. | 2NF-1: secure fluency in + and – facts within 10 through continued practice.2AS-1: Add and Subtract across 102AS-2: recognise the subtraction structure of ‘difference’ and answer questions of the form, ‘How many more…?’2AS-3: + and – within 100 by applying related 1 digit addition facts: + and – only ones or only tens to/from 2 digit numbers.2AS-4: + and – within 100 by applying related one digit + and – facts: add and subtract any 2 digit numbers |
| **Key skills- TAF/ELGs**  | ELG- Number* Have a deep understanding of number to 10, including the composition of each number
* Automatically recall (without reference to rhymes etc) number bonds to 5 (incl subtractions facts) and some number bonds to 10, including double facts

ELG- Numerical patterns* explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally
 |  | WT- + and – 2 digit numbers and one/tens where no regrouping is required explaining method verbally/pictures/resourcesWT- recall at least 4 number bonds for 10 and reason about associated factsEXP- + and – any 2 digit numbers using an efficient strategy explaining method verbally/pictures/resourcesEXP- recall all number bonds to 10 and use to reason with, and calculate bonds to and within 20, recognising associated additive relationships.GD- solve unfamiliar word problems involving more than 1 stepGD- use reasoning about numbers and relationships to solve more complex problems and explain their thinking. |

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| **MULTIPLICATION & DIVISION** | **Reception** | **Year 1** | **Year 2** |
| **Multiplication & Division:****Recall, Represent, Use****Calculations****Solve Problems** | * Numerical patterns
* Doubling
* Halving and sharing
* Odds and evens
 |  | * Counting in 2s, 5s, 10s
* Solve one step problems involving multiplication and division by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher
 | Summer 1 | * Recall and use multiplication and division facts for the 2,5 and 10 Multiplication tables, including recognising odd and even numbers.
* Show that multiplication of two numbers can be done in any order (Commutative) and division of one number by another cannot.
* Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and (=) signs
* Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.
 | Spring 1 |
| **Vocab** | double, halve, half, share, odd, even, problem, explain | equal groups, arrays, doubles, grouping, sharing, multiples of 2, 5, 10, multiply, times, divide, share, group | equal, unequal, whole, groups of, lots of, parts, array, multiply, divide |
| **Ready to progress criteria** | \* Distribute items fairly, for example, put 3 marbles in each bag.\* Recognise when items are distributed unfairly. | 1NF-2: count forwards and backwards in multiples of 2, 5 and 10 up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers. | 2MD-1: recognise repeated addition contexts, representing them with x equations and calculating the product, within the 2, 5 and 10 times tables2MD-2: relate grouping problems where the number of groups is unknown to x equations with a missing factor, and to ÷ equations |
| **Key skills – TAF/ELGs** | ELG- Numerical patternsexplore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally |  | WT- count in 2s, 5s and 10s from 0 and use this to solve problemsEXP- recall x and ÷ facts for 2, 5, 10 and use them to solve simple problems demonstrating understanding of commutativity as necessary.GD- recall and use x and ÷ facts for 2, 5, 10 and make deductions outside known x facts. |

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| **FRACTIONS** | **Reception** | **Year 1** | **Year 2** |
| **Fractions: Recognise and Write****Compare****Calculations** |  |  | * Recognise, find and name a half as one of two equal parts of an object, shape or quantity.
* Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.
 | Summer 2 | * Recognise, find name and write fractions 1/3, ¼, 2/4, and ¾ of a length, shape, set of objects or quantity.
* Recognise the equivalence of 2/4 and ½
* Write simple fractions eg. ½ of 6 = 3
 | Spring 2 |
| **Vocab** |  | half, quarter, parts, split, cut | equal part, whole, half, quarter, third, non unit fractions, unit fractions, equivalent fractions, numerator, denominator |
| **Key Skills/Ready to progress criteria** |  |  |  |
| **Keys Skills- TAF/ELGs** |  |  | EXP- identify ¼, 1/3, ½, 2/4, ¾ of a number or shape, and know that all parts must be equal parts of the whole. |

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| **MEASURES** | **Reception** | **Year 1** | **Year 2** |
| **Length, mass, temp, capacity:** **Use, estimate, measure and compare****Money: Use, write, compare & calculate****Time: Use, write, measure and compare** | * use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems
 |  | **Length/height, mass/weight, capacity & volume*** compare, describe & solve practical problems
* Measure and begin to record

**Money*** recognise and know different value of coins

**Time*** sequence events in chronological order
* recognise and use language for dates- days, week, months, years
* tell time to hour and half past and draw hands on the clock
 |  | **Length/height, mass, temp, capacity*** Choose and use appropriate standard units to estimate and measure using appropriate equipment
* compare and order measurements using < > =

**Money*** recognise and use symbols of £ p; combine amounts to make particular value
* find different combinations of coins to make same amount
* solve problems involving +, - of money of the same unit, including giving change

**Time*** compare and sequence intervals of time
* tell and write time to 5 ins, including quarter past/to and draw hands on the clock face.
* know number of minutes in an hour and number of hours in a day.
 | Spring 2 |
| **Vocab** | balance, weight, heavy, light, capacity, full, empty, half, length, height, long, short, tall, size, distance, measure money, pence, poundfirst, second, third, before, after, days of the week, today, yesterday, month, date, tomorrow, next, last, clock, hands, hour, o’clock, minute, sequence | compare, measure, long, longer, short, shorter, tall, small, taller, cubes, centimetres, weight, weigh, mass, scales, balance, heavy, heavier, light, lighter, full, empty, more than, less than, half, half full, half empty, quarter, capacity, volume, liquidvalue, recognise, count, denomination, coins, notes, exchange, equal, equivalentsort, order, before, after, dates, hour, minute, seconds, record, half hour, Mon-Sunday, months of the year, before, after, next, first, last, finally, today, tomorrow, yesterday, morning, afternoon, evening, noon, quick, slow, quicker, slower, earlier, later | measure, length, compare, order, metre, centimetre, longer/longest, shorter/shortest, temperature, degree Celsius, capacity, mass, weight, kilogram, gram, litre, millilitrecoins, notes, pounds, pence, total, change, amount, differenceo’clock, half past, quarter past/to, clock, face, hands, minute, seconds, hours, minutes past/to |
| **Ready to progress criteria** |  |  |  |
| **Key Skills- TAF/ELG** |  |  | Measures: EXP- read scales in divisions of 1s, 2s, 5s, and 10sGD- read scales where not all numbers on the scale are given and estimate points between.Money:WT- know the value of different coins.EXP- use different coins to make the same amountTime:EXP- read time on a clock to the nearest 15minsGD- read time on a clock to nearest 5mins |

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| **SHAPE** | **Reception** | **Year 1** | **Year 2** |
| **Shape: Recognise and name****Describe****Compare** | * children explore characteristics of everyday objects and shapes and use mathematical language to describe them
 |  | * Recognise and name common 2D and 3D shapes
 |  | * identify and describe properties of 2D shapes including sides, vertical line of symmetry
* identify and describe properties of 3D shapes including edges, vertices and faces
* identify 2D shapes on surface of 3D shape
* compare and sort common 2D, 3D shapes and everyday objects.
 | Spring 2 |
| **Vocab** | rectangle, square, oval, triangle, circle, pentagon, hexagon, 2D, 3D, flat, cube, cuboid, sphere, cone, pyramid, describe, sort, shape | circle, square, triangle, rectangle, pentagon, 3D, 2D, pattern | 3D, 2D, curved surface, flat surface, vertices, vertex, side, corner, face, edge, cube, cuboid, cone, cylinder, sphere, pyramid, prism, rectangle, square, triangle, quadrilateral, pentagon, hexagon, vertical line of symmetry, symmetrical |
| **Ready to Progress Criteria** | \* See, explore and discuss models of common 2D and 3D shapes with varied dimensions and presented in different orientations (eg triangles not always on their base)\* select, rotate and manipulate shapes for a particular purpose, eg rotating a cylinder so it can be used to build a tower, rotating a puzzle piece to fit in its place. | 1G-1: recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another1G-2: compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations | 2G-1: Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties. |
| **Key Skills- ELG/TAF** |  |  | WT- name some common 2D & 3D shapes and describe some of their properties.EXP- name and describe properties of 2D and 3D shapes incl. number of sides, vertices, edges, faces & lines of symmetry.GD- describe similarities and differences of 2D & 3D shapes using their properties. |

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| **POSITION & DIRECTION** | **Reception** | **Year 1** | **Year 2** |
| **Position & Direction: Recognise and Write****Compare****Calculations** | * recognise, create and describe patterns
* use everyday language to talk about position
 |  | * describe position, direction and movement, including whole, half, quarter and three quarter turns.
 |  | * order and arrange combinations of mathematical objects in patterns and sequences
* use math vocab to describe position, direction and movement including in a straight line and in right angles for quarter, half, three quarter turns
 | Spring 2 |
| **Vocab** | colour, pattern, repeat, describe, build, model, picture, in, on, beside, next to, under, below, above, behind | above, below, next to, on top, underneath, beside, bottom, top, in front, behind, between, turn, position, full, half, quarter, three quarter, direction, same, different, left, right, forwards, backwards, diagonally | whole, turn, quarter, half, three quarter, clockwise, anticlockwise, straight |
| **Key Skills/Ready to progress criteria** |  |  |  |

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| **STATISTICS** | **Reception** | **Year 1** | **Year 2** |
| **interpret & construct****ask and answer** |  |  |  |  | * interpret & construct simple pictograms, tally harts, block diagrams and tables
* ask and answer questions by counting the number of objects in each category and sort categories by quantity
* ask and answer questions about totalling and comparing categorical data
 | Spring 2 |
| **Vocab** |  |  | tally, pictogram, block diagrams, scale, represent, symbol, key, most/least common/popular, fewer, more, less, difference |
| **Key Skills/ Ready to progress criteria** |  |  |  |