Maths Curriculum Map – Reception

Core Curriculum	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Number and place value – Numbers to 5 • Count up to three or four objects by saying one number name for each item • Count actions or objects that cannot be moved • Recognise numerals 1-5 • Select the correct numeral to represent 1-5 **Addition and subtraction – Sorting** • Sorting into groups • Say the number that is one more or less to 5 **Measurement – Time** • Use everyday language related to time • Order and sequence familiar events • Measure short periods of time in simple ways	**Number and place value – Comparing groups** • Compare quantities of identical objects • Compare quantities of non-identical objects **Addition and subtraction – Change within 5** • Find one more • Find one less **Measurement – Measure** • Order two items by weight or capacity **Geometry – Shape and Space** • Begin to use mathematical names for solid 3D shapes and flat 2D shapes • Use mathematical terms to describe shapes • Select a particular named shape • Use familiar objects and common shapes to create and	**Addition and subtraction – Numbers to 5** • Find the total number of items in two groups by counting all of them • Say the number that is one more than any number • Find one more or one less from a group of up to 5 objects • In practical activities and discussion, is beginning to use the vocabulary involved in adding and subtracting • Record, using marks that they can interpret and explain **Addition and subtraction – Numbers to 10** • Combine two groups to find the whole **Number and place value – Numbers to 10** • Count objects to 10, and begin to count beyond 10 • Count an irregular arrangement of up to ten objects • Say the number that is one more • Find one more or less from a group of up to ten objects • Count out up to six objects from a larger group • Compare groups up to 10 • Use the language of 'more' and 'fewer' to compare two sets of objects **Addition and subtraction – Count on and back** • Find pairs with a total of 6 or 7	**Addition and subtraction – Numbers to 10** • In practical activities and discussion, begin to use the vocabulary involved in adding and subtracting • Find number bonds to 10 using a ten frame • Find number bonds to 10 using a part-whole model • Begin to subtract by guessing how many are hiding • Record, using marks that they can interpret and explain **Geometry – exploring patterns** • Make simple patterns • Explore more complex patterns • Continue a repeating pattern with three colours/shapes/objects • Recognise and create symmetrical patterns	**Addition and subtraction – Count on and back** • Add 1,2 or 3 to any number to 10 by counting on • Taking away by counting back • Find doubles to 5 +5 **Measurement – Measure** • Order two or three items by length or height **Geometry – Exploring patterns** • Make simple patterns • Explore more complex patterns • Continue a repeating pattern with three colours/shapes/objects • Recognise and create symmetrical patterns	**Number and place value –Numbers to 20** • Count reliably to 20, place numbers in order and say which number is one more or one less **Multiplication and Division – Numerical patterns** • Count in 1s and 10s to 100 • Double numbers to 5 +5 • Solve practical problems involving halving and sharing • Use practical resources to find odd and even numbers

		recreate patterns and build models • Describe their relative position such as 'behind' or 'next to'				

Maths through Daily Routines	**Number and Place Value (Securing Numbers, Ordering and Comparing):** Counting forwards and backwards in 1s to 20 - teen numbers; Order a set of consecutive numbers to 10, subitising to 10. **Addition and Subtraction (Multiples):** Partitioning 3 or 4 objects in different ways; Number bonds to 5; Knowing 1 more / less than numbers to 5 / 10; Counting all-combining groups; Counting on to add from any number; Knowing 1 less than numbers to 5; Counting back to subtract **Multiplication and Division (Doubling Numbers / Near Doubles):** Double numbers to 5; Halve even numbers up to 10 by sharing
Vocabulary introduced in Reception	**Number and Place Value:** number, zero 1-20 count on/back lots, more, few, fewer, compare, sort, order, before, after, less, many, most, the same as, ones, pair **Addition and Subtraction:** add, more, altogether, takeaway, number line, one more, one less, equals, equal to, double, half, how many? make, total **Fractions:** double, half, whole **Measure:** days of the week, week, month, year, weekend, birthday, holiday, morning, afternoon, evening, night, midnight, bedtime, dinnertime, playtime, today, yesterday, tomorrow, before, after, next, last, now, soon, early, late, quick, fast, slow, old, new, watch, clock, always, never, first, size, weight, capacity, time, money long, longer, longest, short, shorter, shortest, heavy, light, empty, full, tall, small, large, thick, thin, low, deep, ruler, far, near, holds, container, weigh, weighs coin, buy, sell, pay, price, how many? **Multiplication and Division:** times, counting in ones, twos, fives, tens, lots of, groups of, once, twice, five times sharing, share, set, group, left, left over **Geometry (Position and Direction):** position, distance, after, before, in, on, inside, under, on top of, behind, next to, above, below, top, bottom, side, outside, around, underneath, in front, front, back, before, middle, up, down, forwards, backwards, across, close, far, along, to, from, slide, roll, turn, stretch, bend, move. **Geometry (Properties of Shape):** shape, group, sort, round, flat, straight, make, build, draw. square, circle, triangle, cube, cuboid, sphere **General / Problem Solving:** listen, join in, say, think, imagine, remember, start from, start with, start at, look at, point to, put, place, fit, change, split, carry on, what comes next? find, choose, collect, use, make, build, tell me, pick out, talk about, explain, show me read, write, finish, copy, colour, tick, cross, draw, draw a line between, join (up), ring, arrow, count, work out, answer, fill in, check, in order, every, each.

Maths Curriculum Map – Year 1

Core Curriculum	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Number: Place Value (within 10) • Sort, count and represent objects • Count, read and write forwards and backwards from any number 0-10 • Count one more and one less • One-to-one correspondence to compare groups • Compare groups using language such as equal, more/greater, less/fewer • Introduce <,> and = symbols • Compare, order numbers and groups of objects • Ordinal numbers (1st, 2nd, 3rd …) • Use a number line for counting	**Number: Addition and Subtraction (within 10)** • Use a part-whole model • Find number bonds for numbers within 10 • Compare number bonds • Addition-adding together, adding more, finding a part • Subtraction-taking away, how many left? • Subtraction-finding a part, breaking away, counting back, finding the difference • Fact families • Comparing addition and subtraction statements **Geometry: Shape** • Recognise and name 3-D shapes • Sort 3-D shapes • Recognise and name 2-D shapes • Sort 2-D shapes • Make patterns with 2-D and 3-D shapes	**Number: Place Value (within 20)** • Count within 20 Understand 10 Understand 11, 12 and 13 Understand 14, 15 and 16 Understand 17, 18 and 19 Step 6 Understand 20 • 1 more and 1 less The number line to 20 • Use a number line to 20 • Estimate on a number line to 20 Compare numbers to 20 • Order numbers to 20 **Number: Addition and Subtraction (within 20)** • Add by counting on within 20 • Add ones using number bonds • Find and make number bonds to 20 • Doubles • Near doubles Subtract ones using number bonds Subtraction – counting back • Subtraction – finding the difference • Related facts • Missing number problems	**Number Place Value (within 50)** • Count from 20 to 50 20, 30, 40 and 50 Count by making groups of tens • Groups of tens and ones • Partition into tens and ones • The number line to 50 • Estimate on a number line to 50 • 1 more, 1 less **Measurement: Length and Height** • Compare lengths and heights • Measure length using objects • Measure length in centimetres **Measurement: Weight and Volume** • Heavier and lighter Measure mass • Compare mass • Full and empty • Compare volume • Measure capacity • Compare capacity	**Number: Multiplication and Division** • Count in 2s, 5s, 10s • Make and add equal groups • Make arrays • Make doubles • Make equal groups-grouping and sharing **Number: Fractions** • Find halves and quarters **Geometry: Position and Direction** • Describe turns and position	**Number: Place Value (within 100)** • Count forwards and backwards within 100 • Partition numbers • Compare and order numbers • One more, one less **Measurement: Money** • Recognise coins and notes • Count in coins **Measurement: Time** • Before and after • Dates • Tell time to the hour and half hour • Compare time

Vocabulary introduced in Year 1	**Number and Place value:** 20-100 count (on/up/to/from/ down), least, fewest, smallest, greater, lesser, equal to, odd, even, units, tens, ten more/less, digit, numeral, figure(s), compare (In) order/a different order, size, value, between, halfway between, above, below.
	Addition and subtraction: number bonds, addition, plus, sum, greater, inverse, near double, halve, is the same as, (including equals sign), difference between, how many more to make..?, how, many more is…than..?, how much more is..? subtract, minus, how many fewer is…than..?, how much less is..?
	Fractions: whole, equal parts, four equal parts, one half, two halves, a quarter, two quarters.
	Measurement: size, bigger, larger, length, width, height, depth, taller, tallest, high, higher, highest, wide, narrow, shallow, close, Metre, metre stick. half full, balances, heavier, heaviest, lighter, lightest, scales.
	Measurement (Time): Seasons (Spring, Summer, Autumn, Winter) quicker, quickest, quickly, faster, fastest, slower, slowest, slowly, older, oldest, newer, newest, takes longer, takes less time, hour, o clock, half past, hands, how long ago? how long will it be to…? how long will it take to…? how often? often, sometimes, usually, once, twice, second, third etc, estimate, close to, about the same as, just over/under, too many/few, not enough, enough. spend, spent, change, dear(er), costs more, costs less, cheaper, costs the same as, how much?
	Multiplication and Division: odd, even, count in twos, fives, tens, (forwards from/backwards from), how many times?, multiple of, multiply, multiply by repeated addition, array, row, column, halve, share equally, group in pairs, threes, etc. equal groups of, divide, divided by
	Geometry (Position and Direction): over, beside, opposite, apart, between, edge, centre, corner, direction, journey, left, right, sideways, near, through, towards, away from, movement, whole turn, half turn.
	Geometry (Properties of Shape): pyramid, cone, cylinder. curved, hollow, solid, corner (point, pointed) face, side, edge.
	General / Problem Solving: arrange, rearrange, change over, separate, continue, repeat, describe, explain, record, trace, complete, shade, same number(s)/different number(s)/missing number(s) number facts, same way, different way, best way, another way, in a different order, not all.

10 Minute Maths in Year 1 MASTERING NUMBER (Multiplication)	**MASTERING NUMBER PROGRAMME**			
	Multiplication Count in 2s to 24 link even and odd numbers Count in 10s in order up to 120	**Multiplication** Count in multiples of 5 up to 60 Count in 2s and 10s	**Multiplication** Count in multiples of 10, 2 and 5 fluently	**Multiplication** Count in multiples of 10, 2 and 5 fluently

Maths Curriculum Map – Year 2

Core Curriculum	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Number: Place Value • Count forwards and backwards within 20 • Tens and ones within 20 • Count forwards and backwards within 50 • Tens and ones within 50 • Compare numbers within 50 • Count objects, read, write and represent numbers to 100 • Tens and ones with a part whole model • Tens and ones using addition • Use a place value chart • Compare and order objects and numbers **Number: Addition and Subtraction** • Fact families-addition and subtraction bonds to 20 • Compare number sentences and related facts • Bonds to 100 (10s) • Add and subtract 1s • 10 more and 10 less • Add and subtract 10s • Add by making 10 • Add a 2 and 1 digit number – crossing 10 • Subtract a 1 digit from a 2 digit number-crossing 10 • Add 2 digit numbers not crossing then crossing 10	**Number: Multiplication and Division** • Make and add equal groups • Make arrays **Geometry: Properties of Shape** • Recognise 2D and 3D shapes • Count sides and vertices on 2D shapes • Draw, sort and make patterns with 2D shapes • Lines of symmetry • Count faces, edges and vertices on 3D shapes • Sort and make patterns with 3D shapes	**Measurement: Money** • Count money – pence Count money – pounds (notes and coins) • Count money – pounds and pence • Choose notes and coins Make the same amount Compare amounts of money • Calculate with money Make a pound • Find change • Two-step problems **Number: Multiplication and Division** • Recognise equal groups • Make equal groups • Add equal groups • Introduce the multiplication symbol • Multiplication sentences • Use arrays • Make equal groups – grouping • Make equal groups – sharing • The 2 times-table • Divide by 2 • Doubling and halving • Odd and even numbers • The 10 times-table • Divide by 10 • The 5 times-table • Divide by 5 • The 5 and 10 times-tables	**Measurement: Length and Height** • Measure in centimetres • Measure in metres • Compare lengths and heights • Order lengths and heights • Four operations with lengths and heights **Measurement: Mass, Capacity and Temperature** • Compare mass • Measure in grams • Measure in kilograms • Four operations with mass • Compare volume and capacity • Measure in millilitres • Measure in litres • Four operations with volume and capacity • Temperature	**Statistics** • Make tally charts • Draw and interpret pictograms (1-1) • Draw and interpret pictograms (2,5 and 10) • Block diagrams **Number: Fractions** • Make equal parts • Recognise and find half and quarter • Recognise and find one third • Unit and non-unit fractions • Equivalence of ½ and 2/4 • Find three-quarters • Count in fractions	**Geometry: Position and Direction** • Describe position, movement and turns • Make patterns with shapes **Measurement: Time** • Tell time to the hour and half hour • clock and half past • Quarter past and quarter to • Tell time to 5 minutes • Hours and days • Find and compare durations of time •

Vocabulary introduced in Year 2	
	Number and Place Value: numbers to one hundred, hundreds, partition, recombine, hundred more/less, represents, exchange,
	Statistics: count, tally, sort, vote, graph, block graph, pictogram, represent group, set, list, table label, title most popular, most common, least popular, least common
	Fractions: three quarters, one third, a third, equivalence, equivalent.
	Measurement: quarter past/to, fortnight temperature (degrees) m/cm, g/kg, ml/l
	Multiplication and Division: count in multiples of 3
	Geometry (Position and Direction): rotation, clockwise, anticlockwise, straight line, ninety degree turn, right angle. **Geometry (Properties of shape):** smaller, symmetrical, line of symmetry, fold, match, mirror line, reflection, pattern, repeating pattern, vertices, vertex. pentagon, hexagon, octagon, circular, triangular, right angle.
	General/Problem Solving: predict, describe the pattern, describe the rule, find, find all, find different, investigate.

10 Minute Maths in Year 2 (MATHS BLAST) Retrieval/ Arithmetic Fluency (Multiplication)						
	Counting **Count to and across 100 from any given number** **Count, read and write numbers to 100 in numerals** **Count in multiples of 2, 3, 5 and 10 from any number forward and back.** **Number and Place Value (Securing Numbers, Ordering and Comparing):** **Count forwards and backwards in 1s to 100;** **Order a set of random numbers to 100;** **Compare numbers using symbols < > =** **Multiplication** **Consolidate 2,5,10 in order up to 12X**	**Number and Place Value (Counting):** **Count forwards/backwards in 10s and 1s to 100 (mixed counting)** *e.g.,20, 30, 40 etc, 20, 30, 31, 32, 33 etc, 80, 70, 60 etc* **Number facts (+ -)** **Use place value and number facts to solve problems** **Recall and use addition and subtraction facts to 20 fluently** **Derive and use related facts up to 100** **Multiplication** **Count fluently from 0 in 2,5 and 10** **Recall multiples of 10 up to 12x10 in any order including missing numbers and division facts**	**Addition and Subtraction (Multiples):** **Recall number bonds to 20 and use this to find bonds to 18, 19;** **Add 3 numbers where bond to 10 evident;** **Partition numbers (1 number) using number bonds to add/subtract** (reordering numbers) *e.g. 8 + 7 = 8 + 2 + 5, 13 − 5 = 13-(3-5)* **Subtract any single digit number from a multiple of 10** *e.g. 80 – 7 (knowledge of bonds to 10)* **Mental (+ -)** **Add and subtract numbers mentally:** • A two digit number and 1s • A two digit number and 10s • 2 two digit numbers • Add 3 one digit numbers **Multiplication** **Recall multiples of 2 up to 12x2 in any order including missing numbers and division facts** **Recall multiples of 10 fluently**	**Addition and Subtraction (Adding / Subtracting 10's, 100's, 1000's):** **Add 1 to any number to 100;** **Count in 10s from any number (forwards/backwards);** **Add/subtract near 10s and adjusting** *e.g. 9, 11* **Number bonds to 100** *e.g. 70 + 30;* **Add multiples of ten** *e.g. 30 + 20, 30 + 60, 30 + 80* **Written (+ -)** **Record addition and subtraction in columns to prepare for formal written methods with larger numbers** **Multiplication** **Recall multiples of 5 up to 12x5 in any order including missing numbers and division facts** **Recall multiples of 2 fluently including division facts**	**Multiplication and Division (Doubling Numbers / Near Doubles):** **Double teen numbers** *16 + 16* **Near doubles** *16 + 17*; **Double multiples of 10 to 100** *e.g double 20*; **Halve multiples of 10 with even number of 10s to 100** *e.g. half of 40.* **Focus on doubling/halving multiples of 10 with odd number of 10s by partitioning and recombining** *e.g. half of 30, 50, 70, 30 = 20+10* **Double even numbers up to 100 by partitioning and recombining;** **Halve even numbers up to 100 by partitioning and recombining.** **Multiplication** **Count in multiples of 4 up to 12x4 in order from 0 – Relate to doubling 2** **Recall multiples of 2 fluently including division facts** **Recall multiples of 5 fluently including division facts**	**Multiplication and Division (Order of Operations):** **Explore commutativity using arrays** *e.g. 4 x 3 = 3 x 4;* **Rewrite repeated addition as multiplication;** **Relationship between 5x and 10x table and doubling and halving.** **Mental / Written (x ÷)** **Show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another cannot** **Fractions Decimals and Percentages (Comparing, Ordering and Calculating):** **Count in fractions up to 10, starting from any number and using the 1/2 and 2/4 equivalence on the number line** **Multiplication** **Count in multiples of 4 up to 12x4 in order from 0** **Recall multiples of 5 up to 12x5 fluently and related division facts**

Maths Curriculum Map – Year 3

Core Curriculum	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Number: Place Value • Represent numbers to 100 • Tens and ones using addition • Hundreds • Represent numbers to 1000 • 100s, 10s and 1s • Number line to 1000 • Find 1,10,100 more or less than a given number • Compare objects to 1000 • Compare and order numbers to 1000 • Count in 50s **Number: Addition and Subtraction** • Add and subtract multiples of 100 • Add and subtract 1s • Add and subtract 2,3 and 1 digit numbers and crossing 10 • Subtract 2 digit and 1 digit and then 3 digit and 1 digit numbers and crossing 10 • Subtract 3 and 2 digit numbers and crossing 100	**Number: Addition and Subtraction** • Add and subtract 100s • Spot patterns • Add two 2 digit numbers crossing 10 • Subtract 2 digit from a 2 digit number crossing 10 **Number: Multiplication and Division** • Multiplication-equal groups • Multiplication using the symbol • Using arrays • 2 and 5 times table • Make equal groups-sharing and grouping • Divide by 2,5 and 10 • Multiply and divide by 3 • 3 times table	**Number: Multiplication and Division** • Multiples of 10 • Related calculations • Reasoning about multiplication • Multiply a 2-digit number by a 1-digit number – no exchange • Multiply a 2-digit number by a 1-digit number – with exchange • Link multiplication and division • Divide a 2-digit number by a 1-digit number – no exchange • Divide a 2-digit number by a 1-digit number – flexible partitioning • Divide a 2-digit number by a 1-digit number – with remainders • Scaling • How many ways? **Measurement: Length and Perimeter** • Measure in metres and centimetres Measure in millimetres • Measure in centimetres and millimetres • Metres, centimetres and millimetres • Equivalent lengths (metres and centimetres) Equivalent lengths (centimetres and millimetres) • Compare lengths • Add lengths • Subtract lengths • What is perimeter? • Measure perimeter	**Number: Fractions** • Understand the denominators of unit fractions • Compare and order unit fractions • Understand the numerators of non-unit fractions • Understand the whole • Compare and order non-unit fractions • Fractions and scales • Fractions on a number line • Count in fractions on a number line • Equivalent fractions on a number line • Equivalent fractions as bar models **Measurement: Mass and Capacity** • Use scales • Measure mass in grams • Measure mass in kilograms and grams • Equivalent masses (kilograms and grams) • Compare mass • Add and subtract mass • Measure capacity and volume in millilitres • Measure capacity and volume in litres and millilitres • Equivalent capacities and volumes (litres and millilitres) • Compare capacity and volume	**Number: Fractions** • Making the whole • Count in tenths • Tenths as decimals • Fractions on a number line • Fractions of a set of objects • Equivalent fractions • Compare and order fractions • Add and subtract fractions **Measurement: Money** • Convert pounds and pence • Add and subtract money • Give change **Measurement: Time** • Clock, half past, quarter to and quarter past • Months and years • Hours in a day • Telling the time to 5 minutes and the minute • Using am and pm • 24 hour clock • Find and compare durations • Start and end times • Measuring time in seconds	**Geometry: Properties of Shape** • Turns and angles • Right angles in shapes • Compare angles • Draw accurately • Horizontal, vertical, parallel and perpendicular • Recognise and describe 2D and 3D shapes • Make 3D shapes **Statistics** • Make tally charts • Draw and interpret pictograms (2,5 and 10) • Pictograms, bar charts, tables

			• Calculate perimeter	• Add and subtract capacity and volume		

Vocabulary introduced in Year 3	**Number and Place Value:** numbers to 1,000 **Addition and subtraction:** column addition and subtraction **Fractions:** numerator, denominator, unit fraction, non-unit fraction, compare and order, tenths **Measurement:** leap year twelve-hour/24- hour clock, am/pm, century roman numerals I-XII mm **Multiplication and Division:** count in multiples of 4, 8 and 11, product, scale up **Geometry (Position and Direction):** greater/less than 90 degrees orientation (same orientation, different orientation), north, south, east, west **Geometry (Properties of Shape):** horizontal, vertical, perpendicular and parallel lines. perimeter hemi-sphere, prism, semi-circle **Statistics:** chart, bar chart, frequency table, Carroll diagram, Venn diagram, axis, axes diagram					

10 Minute Maths in Year 3 (MATHS BLAST) Retrieval/ Arithmetic Fluency (Multiplication)	**Number and Place Value (Securing Numbers, Ordering and Comparing):** **Count in 100, 10s, 1s from any number to 1000;** **Order a set of random numbers to 1000;** **Compare numbers using symbols < > and = up to 1000** **Number and Place Value (Counting):** **Add 100 to any 2 / 3digit number** e.g., 45 + 100, 145 + 100; **Add multiples of 100 to any 2 / 3 digit number** 45 + 200, 145 + 200, 145 + 700 (regrouping) **Counting** **Count from 0 in multiples of 4,8,50 and 100** **Find 10 or 100 more or less than a given number** **Multiplication** **Count in multiples of 2 up to 12x2 in any order including missing numbers and division facts.** **Count in multiples of 4 up to 12x4 in order from 0 with growing fluency**	**Addition and Subtraction (Multiples):** **Add any multiple of 10 to a 2/3 digit number** e.g. 153 + 20, 153 + 70 (regrouping); **Subtract any multiple of 10 from a 2/3 digit number,** e.g. 153 – 20, 153 – 70 (regrouping) **Counting in 10s** e.g. Use number bonds/partitioning 153 – (50 + 20); **To subtract many amounts, combine to add first in context.** Eg £1 - (20p – 30p), £1 – 50p **Multiplication** **Recall multiples of 4 up to 12x4 in any order, missing numbers and division facts Introduce (relating to 4) and begin to count multiples of 8 from 0 to 12x8**	**Addition and Subtraction (Adding / Subtracting 10's, 100's, 1000's):** **Add 10 to any number,** 43 + 10, 143 + 10, **Add multiples of 10 to any number** e.g. 43+ 30 (no regrouping), 43 + 70 (regrouping), 143 + 30 (no regrouping), 143 + 70 (regrouping); **Explain effects of adding 10. Why do 1s not change when adding 10s? When will 100s change?;** **Add near multiples of 10** e.g. + 99, 31, 29 etc including in simple money context e.g. 99p, £1.99 **Multiplication** **Recall multiples of 4 up to 12x4 in any order, missing numbers and division facts** **Count in multiples of 8 to 12x8 in any order**	**Addition and Subtraction Mental (+ -)** **Add and subtract numbers mentally, including:** • A three digit number and 1s • A three digit number and 10s • A three digit number and 100s **Multiplication** **Recall multiples of 4 up to 12x4 in any order, missing numbers and division facts** **Count in multiples of 8 to 12x8 in any order**	**Multiplication and Division (Doubling Numbers / Near Doubles):** **Doubles of multiples of 10/near10s 60 + 60, 60 + 70; Review doubling/halving multiples of 10 with odd number of 10s by partitioning and recombining** e.g. half of 30, 50, 70, 30 = 20+10, Half is 10 + 5 = 15; **Double simple 3 digit numbers (multiples of 10, 50, 100)** e.g. double 200, double 250 **Multiplication** **Recall multiples of 4 up to 12x4 in any order, missing numbers and division facts Recall multiples of 8 up to 12x8 in any order, missing numbers and division facts**	**Fractions and Decimals** **Count up and down in tenths Add and subtract fractions with the same denominator within one whole** **Multiplication and Division (Order of Operations):** **Multiplication and division of whole numbers by 10 exploring the effect of moving digits** e.g. 6 x 10, 10 x 10, 16 x 10; **Use known facts to multiply and divide by multiples of 10** e.g. 6 x 3, 6 x 30 **Knowledge of doubling** e.g. double 4x table = 8x; Know that... e.g. 50 x 2 = 100, 25 x 4 = 100, 20 x 5 = 100; **Link to measure and reading scales** e.g. 50p x 2 = £1.00, £50 x 2 = £100, 25p x 4 = £1.00 £25 x 4 = £100, 20p x 5 = £1.00 , 1000g = 1kg 1000ml = 1l , 1000cm = 1km, 1000 ÷ 2 = 500 1000 ÷ 4 = 250, ½ l/kg/km = 500, ¼ l/kg/km = 250, ¾ l/kg/km = 750 **Multiplication** **Recall multiples of 8 up to 12x8 in any order, missing numbers and division facts Introduce counting in 3s and multiples of 3**

Maths Curriculum Map – Year 4

Core Curriculum	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Number: Place Value • Represent numbers to 1000 • 100s,10s and 1s • Number line to 1000 • Round to nearest 10,100 • Count in 1000s • 1000s,100s,10s,1s • Partitioning • Number line to 10000 • Find 1,10,100 more or less • 1000 more or less • Compare numbers **Number: Addition and Subtraction** • Add and subtract 1s,10s,100s,1000s • Add two 3 digit numbers not crossing then crossing 10 and 100 • Add two 4 digit numbers, no exchange then one or more exchanges • Subtract a 3 digit from a 3 digit number no exchange • Subtract a 4 digit from a 4 digit number no exchange • Subtract a 3 digit from a 3 digit number-exchange • Subtract two 4 digit numbers-exchange • Efficient subtraction • Estimate answers and check strategies	**Number: Multiplication and Division** • Multiply and divide by 10 and 100 • Multiply by 1 and 0 • Divide by 1 and itself • Multiply and divide by 3 • The 3 times table • Multiply and divide by 6 • 6 times table and division facts • Multiply and divide by 9 • 9 times table and division facts • Multiply and divide by 7 • 7 times table and division facts **Measurement: Area** • What is area? • Counting squares • Making shapes • Comparing area	**Number: Multiplication and Division** • Factor pairs • Use factor pairs • Multiply by 10 • Multiply by 100 • Divide by 10 • Divide by 100 • Related facts – multiplication and division • Informal written methods for multiplication • Multiply a 2-digit number by a 1-digit number • Multiply a 3-digit number by a 1-digit number • Divide a 2-digit number by a 1-digit number (1) • Divide a 2-digit number by a 1-digit number (2) • Divide a 3-digit number by a 1-digit number • Correspondence problems • Efficient multiplication **Measurement: Length and Perimeter** • Measure in kilometres and metres • Equivalent lengths (kilometres and metres) • Perimeter on a grid • Perimeter of a rectangle • Perimeter of rectilinear shapes • Find missing lengths in rectilinear shapes • Calculate perimeter of rectilinear shapes • Perimeter of regular polygons	**Number: Fractions** • Understand the whole • Count beyond 1 • Partition a mixed number • Number lines with mixed numbers • Compare and order mixed numbers • Understand improper fractions • Convert mixed numbers to improper fractions • Convert improper fractions to mixed numbers • Equivalent fractions on a number line • Equivalent fraction families • Add two or more fractions • Add fractions and mixed numbers • Subtract two fractions • Subtract from whole amounts • Subtract from mixed numbers **Number: Decimals** • Tenths as fractions • Tenths as decimals • Tenths on a place value chart • Tenths on a number line • Divide a 1-digit number by 10 • Divide a 2-digit number by 10 • Hundredths as fractions • Hundredths as decimals • Hundredths on a place value chart • Divide a 1- or 2-digit number by 100	**Number: Decimals** • Bonds to 10 and 100 • Make a whole • Write, compare and order decimals • Round decimals • Halves and quarters **Measurement: Money** • Pounds and pence • Ordering money • Estimating money • Convert pounds and pence • Add and subtract money • Find change • Four operations **Measurement: Time** • Telling the time to 5 minutes • Telling the time to the minute • Using a.m. and p.m. • 24 hour clock • Hours, minute and seconds • Years, months, weeks and days • Analogue to digital-12 hour • Analogue to digital - 24 hour	**Statistics** • Interpret charts • Comparison, sum and difference • Introduce line graphs **Geometry: Properties of Shape** • Turns and angles • Right angles in shapes • Compare, identify and order angles • Recognise and describe 2-D shapes • Triangles and quadrilaterals • Horizontal and vertical • Lines of symmetry • Complete a symmetrical figure **Geometry: Position and Direction** • Describe a position • Draw on a grid • Move on a grid • Describe movement on a grid

Vocabulary introduced in Year 4	**Number and Place value:** tenths, hundredths, numeral decimal places round (to nearest) thousand more / less negative integers count through zero roman numerals I to C **Multiplication and Division:** count in multiples of 6, 7, 9, 12, inverse, derive division facts **Fractions:** equivalent fractions and decimals, decimal point, decimal fraction hundredths **Geometry (Position and Direction):** co-ordinates translation, translate, quadrant x-axis, y-axis **Geometry (Properties of Shape):** area, net rectilinear adjacent quadrilaterals: (rhombus, parallelogram, trapezium, trapezoid, kite). heptagon, polygon, tetrahedron, polyhedron, cylindrical triangles (isosceles, scalene) right angle, acute angle, obtuse angles **Measurement:** convert, noon **Statistics:** continuous data, line graphs

| 10 Minute Maths in Year 4 (MATHS BLAST) Retrieval/ Arithmetic Fluency (Multiplication) | **Number and Place Value (Securing Numbers, Ordering and Comparing):** Count in 1s across boundaries 1000, 10,000, 100,000; Order a set of random numbers to 100,000; Compare numbers using symbols < and < up to 100,000 **Counting** Count in multiples of 6,7,9, 25 and 1000 Find 1000 more or less than a given number through zero to include negative numbers **Multiplication** Recall multiples of 3, 4 and 8 up to 12 x in any order including missing numbers and related division facts fluently Fluently count in 6s up to 12x6 | **Number and Place Value (Counting):** Count in 10, 100s, 1000s forwards and backwards across boundaries 1000, 10,000, 100,000; What is 10, 100, 1000 more/less than ….?; Round any number to the nearest 10, 100 or 1 000; **Addition and Subtraction (Multiples):** Add any multiple of 10 to a 4-digit number e.g.,2153 + 20, 2153 + 70 (regrouping); **Add any multiple of 100 to a 4-digit number** e.g.2153 + 100, 2153 + 300, 2153 + 900 (regrouping) **Written (+ -)** Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate **Multiplication** Introduce 6s in order up to 12x6 Relate to multiples of 3 Fluently count in 9s in order up to 12x9 | **Fractions and decimals** Count up and down in hundredths Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten Written (+ -) Multiply two and three digit numbers by a one digit number using formal written layout **Multiplication** Recall multiples of 6 in any order missing boxes and division Recall multiples of 9 and order including missing numbers and division facts fluently Fluently count in 7s in order up to 12x7 | **Multiplication and Division (Doubling Numbers / Near Doubles):** Near doubles to multiple of 10 e.g., 60 + 59; Double simple 3-digit numbers by recall of known facts or partitioning and recombining (multiples of 10, 50, 100) e.g. double 200, double 250, double 220, half of 140. **Multiplication and Division (Order of Operations):** Multiplication and division of whole numbers by 10 and 100 and multiples of e.g.,6 x 100, 10 x 100.. Distributive law e.g.,39 x 7= 30 x 7+ 9 x 7; Associative law and reordering calculations to make it easier, expressing equal calculations e.g. 2 x 6 x 5 = 10 x 6; Multiply by 50 by multiply by 100 and halving e.g. 23 x 50= half of 23 x 100; Know all the table facts and the related division facts e.g. 500 x 2 = 1000, 1000 ÷ 2 = 500, 250 x 4 = 1000, 1000 ÷ 4 = 250, 200 x 5 = 1000, 1000 ÷ 5 = 200; **Multiplication** Recall multiples of 7 and order including missing numbers and division facts fluently Fluently count in 11s in order up to 12x12 | **Number and Place Value (Counting):** Round decimals with one decimal place to the nearest whole number **Multiplication and Division (Rounding and Adjusting):** Rounding and adjusting decimals in context of money e.g, 3 items costing 99p or £1.99 **Mental / Written (x ÷)** Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; Multiply together three numbers Recognise and use factor pairs and commutativity in mental calculations **Multiplication** Recall multiples of 7 and 11 in any order. Fluently count in 12s **MULTIPLICATION TABLES CHECK** | **Fractions and decimals** Add and subtract fractions with the same denominator 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 Count up and down in hundredths; 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; recognise and write decimal equivalents of any number of tenths or hundredths, recognise and write decimal equivalents to 1/4; 1/2; 3/4 **Multiplication** Recall multiples of 12 in any order. **END OF YEAR SECURE IN ALL 12 TIMES TABLES** |