

Year R Maths Medium Term Plan

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
AUTUMN term 1	Home visits	To count reliably (from 0-20) NPV To count objects to 10, and beginning to count beyond 10 (<i>Can count in a line</i>) NPV	To use one to one correspondence (touch each object and give it a number 0-20) NPV Uses positional language (below, above, next to, beside, in front, behind and on top) GP	To count actions or objects which cannot be moved. NPV	To count objects in a group/ irregular arrangement of up to ten objects (same group/different group). NPV	To represent numbers using fingers, marks on paper or pictures. NPV To recognise numerals. (0 to 5, 0-10 & 0-20) NPV	To order numbers to 20. NPV
AUTUMN term 2	To write numbers to 20. NPV	To find/ say the number which is one more or one less than a given number. A & S Describes their relative position such as 'behind' or 'next to'.	Relates addition to combining two groups. A	Relates subtraction to taking away. S	To find one more or one less from a group of up to five objects, then ten objects. A & S	Selects the correct numeral to represent 1 to 5, then 1 to 10 objects. To set out groups and find the total amount. Mx	Uses mathematical terms to describe 2d shapes. GS
SPRING term 1	To estimate how many objects they can see and check by counting. NPV They recognise, create and describe patterns. To count patterns. Mx	To recognise the number of objects in a small group without counting out (subitise). NPV Orders two or three items by length or height. M	Uses quantities and objects, to add two single-digit numbers and count on to find the answer. A	To count on when adding to a group (holding first number in head) A	To add two sets of objects which are the same (cars + cars) then different (apples + bananas) A Orders two items by mass. (using everyday language) M	Uses everyday language to solve problems. M Increase one quantity by a given amount to find the total (augmentation) A	
SPRING term 2	To use quantities and objects, to subtract two single-digit numbers (count on or back) to find the answer. S To count backwards.(on a number line or counting stick.)	To recognise and name +, =, - signs. A & S To read an addition number sentence. A To solve an addition number sentence. A	To recognise and name +, =, - signs. A & S To read a subtraction sentence. S To solve a subtraction number sentence. S	To share objects equally. D To group objects. D	Orders two items by capacity. (using everyday language) M Uses everyday language to compare quantities & objects. M Uses everyday language to talk	Orders and sequences familiar events. M Uses everyday language related to time (begins to identify o'clock) M	

	S				about distance. M		
SUMMER term 1	To skip count in 2s, 5s & 10s. Mx To make 5 and 10 (feel the tenness of ten). NPV	To skip count in 2s, 5s & 10s. Mx To arrange an addition number sentence. A&S To arrange a subtraction number sentence. S	To skip count in 2s, 5s & 10s. Mx To halve (an even group up to 12) S & D To solve problems involving grouping and sharing. F	To skip count in 2s, 5s & 10s. Mx To share an even group of objects between 2, between 4. D & F	To skip count in 2s, 5s & 10s. Mx Begin to understand odd and even. Mx & D To count up to 20 (objects/ images in an array) D	To skip count in 2s, 5s & 10s. Mx Uses everyday language to talk about money. M Demonstrates understanding that £1 has greater value than pennies. M	
SUMMER term 2	Shares an even group of objects between 4. D	To know number families to 5, 6 & 10. A & S	To know doubles to 10. A Begin to relate the addition of doubles to counting on (how many wheels on 2 cars? 4... 5,6,7,8 4+4=8) Mx	To identify half a group of objects. F	Know and name different coins – 1p, 2p, 5p, 10p, 20p, 50p, £1 & £2. M Can use 1p, 2p, 5p & 10p coins to make amounts up to 20p. M	To identify half a shape. F To put together halves to make whole shapes. F To break an object in half. F	Uses mathematical terms to describe 3d shapes. GS

Year 1 Maths Medium Term Plan

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Term 1	<p>Number and place value COUNTING RELIABLY – not on PAM To identify one more and one less. To compare quantities (using equal to, more than, less than (fewer), most, least) To match numbers and quantities. CG - Given a number, identify one more and one less with numbers up to 20 Use the language of: equal to, more than, less than (fewer), most, least Use 1 to 1 correspondence to count sets of at least 20 reliably</p>	<p>Number and place value To locate numbers on a number line. To read & write numbers from 1-20 in numerals and words. To identify odd and even numbers. CG – Identify and represent numbers to at least 20 using objects and pictorial representations including the number line Use number names in order to at least 20 Read and write numbers from 1 to 10 progressing to 20 in numerals Read and write numbers from 1 to 10 progressing to 20 in words (not necessarily spelt correctly) Recognise even numbers up to 10 Recognise odd and even numbers to 20</p>	<p>Addition To add with number bonds within 10 To know all number bonds to 10 CG - Recall and use addition and subtraction facts for all numbers up to 5 and some facts to 10 Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs Add and subtract numbers mentally including 2 single digit numbers, a number up to 20 and 1's Add and subtract one-digit and two-digit numbers to 20, including zero</p>	<p>Addition To investigate all possible sets of two numbers to make a given number. To partition numbers into part, part, whole CG – Recall and use addition and subtraction facts for all numbers up to 5 and some facts to 10 Represent and use number bonds and related subtraction facts within 20 Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs Add and subtract numbers mentally including 2 single digit numbers, a number up to 20 and 1's Add and subtract one-digit and two-digit numbers to 20, including zero</p>	<p>Subtraction To break numbers into parts To subtract with number bonds CG – Recall and use addition and subtraction facts for all numbers up to 5 and some facts to 10 Represent and use number bonds and related subtraction facts within 20 Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs Add and subtract numbers mentally including 2 single digit numbers, a number up to 20 and 1's Add and subtract one-digit and two-digit numbers to 20, including zero</p>	<p>Subtraction To subtract by taking away. To subtract by counting on To subtract small numbers where sets are hidden (counting on) CG – Recall and use addition and subtraction facts for all numbers up to 5 and some facts to 10 Represent and use number bonds and related subtraction facts within 20 Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs Add and subtract numbers mentally including 2 single digit numbers, a number up to 20 and 1's Add and subtract one-digit and two-digit numbers to 20, including zero</p>	
Term 2	<p>Number and place value To understand ordinal numbers. To compare numbers up to 20 (and beyond). To describe and extend number sequences. CG - Respond to and use terms such as first, second and third</p>	<p>Measure – money To recognise and know the value of different coins and notes To exchange money To solve problems involving money (making amounts in different ways) CG - Recognise and know the value of different denominations of coins and notes 1p,2p,5p,10p,20p,£1 and £2</p>	<p>Addition/subtraction (money)</p>	<p>Measure – length To compare and order length To measure using a starting line To measure in non standard units CG – Solve simple measure problems in a practical context using direct comparison and non standard units Measure and begin to record – lengths and height</p>	<p>Addition/subtraction (length)</p>	<p>Geometry – properties of shapes Recognise and name common 2-D shapes (rectangles (including squares, circles and triangles) Recognise and name 3-D shapes. To recognise shapes in different orientations and sizes. To make models, patterns and pictures</p>	<p>Statistics CG - Begin to group objects into sets according to simple properties Answer simple questions by counting the number of objects in a category Interpret and construct simple pictograms (where the picture is worth 1</p>

	<p>Begin to use place value to order numbers Order numbers 1 to 20 in ascending and descending order</p>	<p>Combine amounts to make small values</p>				<p>using construction kits and everyday material. To identify shapes in the environment. To identify and make patterns. CG - Recognise and name common 2-D and 3-D shapes, including: ☐ 2-D shapes [for example, rectangles (including squares), circles, pentagons, hexagons and triangles] ☐ 3-D shapes [for example, cuboids (including cubes, pyramids, cones and spheres)] Sort shapes based on simple properties Solve simple problems involving shapes</p>	<p>unit)), tally charts and block diagrams</p>
Term 3	<p>Measure –Time To sequence events in chronological order To tell the time to the hour To tell the time to the half an hour CG – Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] Recognise and use language relating to dates, including days of the week, months and years Know there are 7 days in the week Know the name of the day before measure and begin to record time</p>	<p>Number and place value To make ten. To regroup (carry out a fair swap). To make ten and count on (in concrete) To identify ten and count on (in pictorial). CG - Recall and use addition and subtraction facts for all numbers up to 5 and some facts to 10</p>	<p>Addition and subtraction To use a number line to count on. To use a number line to count back. To subtract by counting back To use inverse(write corresponding subtraction facts to given addition facts – number families) CG - Solve missing addition and subtraction problems involving single digit numbers</p>	<p>Measure – Capacity and mass To compare and order mass To weigh mass in non standard units To compare and order capacity and volume CG – Measure and begin to record volume/capacity Solve simple measure problems in a practical context using direct comparison and non standard units</p>	<p>Addition and subtraction (capacity and mass)</p>		

	Tell the time to the hour and half past the hour and draw the hands on a clock face to show o'clock and half past						
Term 4	<p>Addition and subtraction To solve one step word problems using the part whole or adding on concept CG - Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations</p>	<p>Geometry – position and direction To describe position, direction and movement including back forward. To identify left and right. To use prepositional language. To give directions To make turns in both directions. To link turns with the hands on a clock CG - Respond to and use terms such as first, second and third Describe position, direction and movement, including whole, half, quarter and three- quarter turns Solve simple problems involving position and direction</p>	<p>Addition To add with number bonds to 20 To add two 1 digit numbers using the make 10 strategy To add 1 digit and a 2 digit number using the regrouping into tens and ones strategy CG - Represent and use number bonds and related subtraction facts within 20</p>	<p>Multiplication To place into equal groups To double numbers To double two digit numbers CG- Recall and use doubling and halving facts for numbers up to double 5</p>	<p>Division To solve division problems by sharing equally (up to 20 then beyond) To solve division problems by finding the number of groups (up to 20 then beyond)</p>	<p>Fractions To recognise half an object (as one of two equal parts) To recognise a quarter of an object (as one of two equal parts) To recognise half a shape (as one of two equal parts) To recognise a quarter of a shape (as one of two equal parts) To identify half a quantity (to share equally between 2 To place fractions on a number line. To identify halves (use Cuisenaire rods) CG – Recognise, find and name a half as one of two equal parts of an object or shape Recognise and find half of a moveable small set of objects or a quantity Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity Begin to solve simple problems involving fractions</p>	
Term 5	Measure – Time	Geometry – properties of shapes	<p>Number and place value To count out a 2 digit number to 20 and regroup in the 1s. To partition and recombine numbers to 20 into 10s and 1s (teen numbers). To partition and recombine any 2 digit number into 10s and 1s.</p>	Measure – Money	<p>Addition and subtraction To subtract within 20 by grouping into tens and ones To make a family of number sentences To use inverse (write corresponding subtraction facts to given addition facts – number families)</p>	<p>Addition and subtraction To solve missing number problems To solve one step word problems using part whole method CG - Solve one-step problems that involve</p>	

						addition and subtraction, using concrete objects and pictorial representations	
Term 6	Addition and subtraction	Addition and subtraction	<p>Multiplication</p> <p>To place objects into arrays Can describe an array in two ways To pictorially represent multiplication sentences</p> <p>CG - Count in 10's from zero to answer questions involving multiplication facts for the 10x table</p>	<p>Multiplication</p> <p>To understand repeated addition To make multiplication stories To move towards the bar model to solve word problems</p> <p>CG - Solve one-step problems involving multiplication and division, (grouping and sharing)by calculating the answer using concrete objects, pictorial representations and arrays</p>	<p>Division</p> <p>To relate grouping to repeated subtraction Use arrays to help solve division problems To know the link between multiplication and division To solve one step word problems To use reasoning to explain</p> <p>CG - Solve one-step problems involving multiplication and division, (grouping and sharing)by calculating the answer using concrete objects, pictorial representations and arrays</p>	<p>Fractions</p> <p>CG - Begin to solve simple problems involving fractions</p>	<p>Statistics</p>

MOS – compass grids

Count to at least 20 forwards and backwards

Count to 100, beginning with 0 or 1, or from any given number

Count to and across 100 forwards and backwards

Count in steps of 10

Begin to count in 10s from any number

Count in multiples of twos, fives and tens

Begin to use place value to order numbers

Use the number facts they know to solve problems

Year 2 Maths Medium Term Plan

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Term 1	<p>Number and place value To represent 2 digit numbers (concrete) To count within 100 by making tens first. To recognise the place value of each digit in a 2 digit number. To compare numbers from 0 – 100. To order numbers from 0-100.</p>	<p>Number and place value To partition and recombine 2 digit numbers into 10s and 1s. To partition and recombine 3 digit numbers into 100s, 10s and 1s. To partition numbers in different ways.</p>	<p>Addition/subtraction To use the counting on strategy (with number line, Dienes or mentally) To use making ten strategy to add (see y1 progression) To use partitioning to add</p>	<p>Addition/subtraction To add a two digit number and tens To add a two digit number and ones without regrouping To add 2 two-digit numbers without regrouping To regroup and rename</p>	<p>Addition/subtraction To break numbers into parts To use the number bond strategy to subtract To subtract a one digit number from a two digit number without regrouping To subtract 2 two-digit numbers without regrouping</p>	<p>Measure – Time To compare and sequence intervals of time. To tell and write the time to quarter past/to and five minutes.</p>	
Term 2	<p>Geometry – properties of shape To identify and describe the properties of 2-D shapes. To identify the line symmetry in a 2-D shape.</p>	<p>Multiplication To identify odd and even numbers To understand multiplication as repeated addition To use arrays</p>	<p>Division To use number bonds for factor and products (using multiples of 2, 5 and 10) To identify missing factors To use concrete apparatus to solve division problems (sharing) To use concrete apparatus to solve division problems (grouping) $20 \div 5 = 4$ To know whether to round up or down depending on context.</p>	<p>Fractions To divide shapes into equal parts. To know that and is equal to a whole. To identify fractions of a shape. (using halves, thirds and quarters) To identify all the different ways to make To recognise of a length, shape and object.</p>	<p>Statistics To replace accordingly with pictograms/tally charts/block diagrams/simple tables To interpret _____ To count the number of objects in each category and sort the categories by quantity, To compare categorical data To construct a _____ To make pictograms and graphs where one symbol represents more than one unit.</p>	<p>Measure – money To recognise and use coins and notes and compare amounts. To select different combinations of coins to make a particular value. To calculate giving change up to and including £1.00. To exchange pence for pounds.</p>	<p>Addition and subtraction – money To solve problems for money with addition and subtraction</p>
Term 3	<p>Number and place value Identify numbers on a number line. To use the greater than, less than and equals signs (<, >, =) To begin to round numbers less than 100 to the nearest 10. Read and write numbers in numerals and words.</p>	<p>Addition/subtraction To add three one-digit numbers To add numbers with regrouping (in ones) To add numbers with regrouping (in tens.) Use the inverse to solve missing number problems To solve one step word problems using ‘part, whole’ and adding on.</p>	<p>Addition/subtraction To use the counting backwards strategy to subtract Use the ‘take away’ strategy to subtract To subtract a one digit number from a two digit number with regrouping To subtract 2 two-digit numbers with regrouping To solve one step word problems using ‘part, whole’</p>	<p>Multiplication/division To know 2, 5, 10 times tables. To multiply using partitioning To understand the commutative property of multiplication. To interpret multiplication sentences (The first factor referring to the number of groups and the second factor as the number of items in each group.)</p>	<p>Multiplication/division To divide with remainders (in concrete) To use pictorial representations to solve division problems (sharing) To use pictorial representations to solve division problems (grouping) To know all corresponding multiplication and division facts (i.e. $2 \times 4 = 8$, $4 \times 2 = 8$ and $8 \div 4 = 2$, $8 \div 2 = 4$)</p>	<p>Measure – Time To tell and write the time to quarter past/to and five minutes.</p>	
Term 4	<p>Measure – Length To measure and compare lengths and heights in metres (> < =).</p>	<p>Addition and subtraction – length context To solve length problems using the four operations .</p>	<p>Multiplication and division – length context To solve length problems using the four operations .</p>	<p>Fractions To identify fractions of a length. (using halves, thirds and quarters)</p>	<p>Geometry – position and direction To order and arrange objects in patterns and sequences.</p>		

	To measure and compare lengths and heights in centimetres.		To break a number into factors To connect the 10 times table with place value To use arrays to help solve division problems	To identify fractions of a set of objects by sharing equally. (between two, three and four) To identify fractions of a quantity. (using halves, thirds and quarters)	To describe the position of objects. To give directions.		
Term 5	Geometry – properties of shape To identify and describe properties of a 3-D shape (edges, vertices and faces) To identify 2-D shapes on the surface of 3-D shapes. To compare and sort common 2-D and 3-D shapes and everyday objects.	Number and place value	Measure – capacity and mass To measure and compare masses in kilograms ($> < =$) . To measure and compare masses in grams ($> < =$) . To measure and compare temperature ($> < =$). To measure and compare volume ($> < =$) .	Addition and subtraction – mass and capacity context To solve mass problems using the four operations.	Multiplication and division - mass and capacity context To solve mass problems using the four operations.	Measure – time	
Term 6	Measure – length To measure and compare lengths and heights in metres ($> < =$) . To measure and compare lengths and heights in centimetres.	Four operations – context measure To solve length, mass, capacity questions using 4 operations	Four operations – context money To solve money questions using 4 operations	Fractions To recognise equivalent fractions. To place fractions on a number line To count in fractions To use the bar model to show fractions	Statistics To read and interpret a simple key To ask and answer questions about categorical data. To read the scale on a graph. To sort objects using more than one criteria (Carroll diagrams) To sort objects using more than one criteria (Venn diagrams)	Geometry – position and direction To describe and control movement. To describe movement in terms of right angles for turns. To programme robots to turn.	Four operations – context measure

Throughout (and when children are ready): To use the bar model to represent word problems, Problem solving (4 types)

Year 3 Maths Medium Term Plan

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Term 1	<p>Number and place value To represent 3 digit numbers (concrete) To find 1, 10 or 100 more than a given number (concrete). To recognise the place value of each digit in a three digit number.</p>	<p>Addition/subtraction To use partitioning to add To use a number line for addition To solve missing number problems To add a three digit number and ones without regrouping (see progression year2)</p>	<p>Addition/subtraction To find the difference using a number line (for near numbers) To use number bonds to subtract mentally (see mental strategies below for progression and next page for exemplification) To subtract without regrouping (see year 2)</p>	<p>Multiplication To use number bonds for factors and products To understand how place value changes when multiplying by 10 To calculate two digit numbers multiplied by one digit numbers</p>	<p>Division To use number bonds for factor and products (using multiples of 3,4 and 8) To identify missing factors To derive related division facts from known multiplication facts To use the distributive property strategy to divide 'friendly' numbers.</p>	<p>Measure – Time Tell and write the time from an analogue clock (standard clock and with Roman numerals). To match digital and analogue clocks.</p>	
Term 2	<p>Fractions, decimals and percentages To identify unit fractions of objects, shapes and length. (a unit fraction has 1 as the numerator) To identify non-unit fractions of objects, shapes and length. (a non-unit fraction has >1 as the numerator) To calculate fractions of a quantity</p>	<p>Fractions, decimals and percentages To recognise equivalent fractions To recognise that tenths arise from dividing an object into ten equal parts</p>	<p>Geometry To draw and describe 2-D shapes (reflective symmetry, regular, irregular) To make 3-D shapes using modelling materials. To recognise 3-D shapes in different orientations.</p>	<p>Statistics To interpret and present data using bar charts To interpret and present data using pictograms To interpret and present data using tables</p>	<p>Measure – volume and capacity To measure and compare volume in l/ml.</p>	<p>Measure – length and mass To measure and compare lengths in m, cm and mm. To measure and compare mass in Kg and g.</p>	<p>Four operations To use multiplication and division to scale by integers. To solve measurement problems using both addition and subtraction.</p>
Term 3	<p>Number and place values – To use part, part whole to partition numbers in different ways. To compare numbers up to 1000 To order numbers up to 1000</p>	<p>Geometry – To measure and calculate perimeter of 2D shapes.. To recognise angles as a property of shape. To identify angles in the environment. To recognise angles as a description of a turn. (half turn, three quarters turn, 360°) To identify right angles, linking to turns and identifying >=< right angles. (acute, obtuse)</p>	<p>Fractions, decimals and percentages – To compare fractions (fractions with the same denominator) To order fractions (fractions with the same denominator) To compare fractions with different denominators</p>	<p>Fractions, decimals and percentages – To recognise equivalent fractions (see exemplification year 4)</p>	<p>Addition and subtraction – To add a three digit number and tens without regrouping (see progression year2) To add 2 three-digit numbers without regrouping To add three-digit numbers with regrouping (revert to expanded method if tricky) To subtract with regrouping in tens and ones To subtract a 3 digit number with regrouping in hundreds and tens To subtract a 3 digit number with regrouping in hundreds, tens and ones</p>	<p>Multiplication and division – To carry out short multiplication without regrouping To carry out short multiplication with regrouping in ones, tens and hundreds To divide a two digit number by a one digit number (in concrete with and without remainders) To divide a two digit number by a one digit number using short division (no remainders)</p>	
Term 4	<p>Statistics – To recognise importance of titles and labels when sorting data</p>	<p>Measure – money To calculate change given in both £ and p</p>	<p>Four operations – money To add three-digit numbers with regrouping (revert to expanded method if tricky)</p>	<p>Measure - time To read and record time to the nearest minute. To compare time in seconds, minutes and hours.</p>	<p>Four operations – To add three-digit numbers with regrouping (revert to expanded method if tricky)</p>		

	To solve one step questions using statistical information. To solve two step questions using statistical information		To subtract a 3 digit number with regrouping in hundreds, tens and ones To divide a two digit number by a one digit number using short division (no remainders) To carry out short multiplication with regrouping in ones, tens and hundreds	To convert hours and minutes.	To subtract a 3 digit number with regrouping in hundreds, tens and ones To divide a two digit number by a one digit number using short division (no remainders) To carry out short multiplication with regrouping in ones, tens and hundreds <i>Word problems</i>		
Term 5	<i>Number and place values –</i> Identify, represent and estimate numbers up to 1000 in numerals and words. To recognise the place value of different measures. To use dimes and coins to understand place value.	<i>Addition and subtraction –</i> To add using place value counters To develop and recognise patterns in addition To estimate the answer to a calculation To solve word problems To count back to find the difference To estimate the answer to a calculation To use inverse operations to check answers To subtract ‘taking away’ one set using the bar model To subtract ‘comparing two sets’ using the bar model	<i>Multiplication and division –</i> To understand measuring and scaling problems To solve problems where items are shared equally (12 sweets between 4 children) To solve problems where items are shared using knowledge of fractions (4 cakes shared between 8 children) To know whether to round up or down depending on context.	<i>Fractions, decimals and percentages –</i> To add like fractions (fractions with the same denominator)	<i>Fractions, decimals and percentages –</i> To subtract like fractions	<i>Fractions, decimals and percentages –</i> To solve word problems involving fractions	
Term 6	<i>Measure – volume and capacity</i> To measure and compare volume in l/ml.	<i>Four operations – volume and capacity</i> To convert between different units of measure. To add three-digit numbers with regrouping (revert to expanded method if tricky) To subtract a 3 digit number with regrouping in hundreds, tens and ones To divide a two digit number by a one digit number using short division (no remainders) To carry out short multiplication with regrouping in ones, tens and hundreds	<i>Measure – length and mass</i> To measure and compare lengths in m, cm and mm. To measure and compare mass in Kg and g.	<i>Four operations – length and mass</i> To convert between different units of measure. To add three-digit numbers with regrouping (revert to expanded method if tricky) To subtract a 3 digit number with regrouping in hundreds, tens and ones To divide a two digit number by a one digit number using short division (no remainders) To carry out short multiplication with regrouping in ones, tens and hundreds	<i>Geometry –</i> To sort symmetrical and non-symmetrical polygons and polyhedra. To connect decimals and rounding to drawing and measuring straight lines. To identify horizontal and vertical lines. To identify pairs of perpendicular and parallel lines.	<i>Statistics –</i> To understand and use simple scales. To classify shapes, numbers and objects into a Venn diagram. To classify shapes, numbers and objects into a Carroll diagram.	<i>Measure - time</i> To calculate and compare duration of events.

Throughout (and when children are ready): To use the bar model to represent word problems, Problem solving (4 types)

Year 4 Maths Medium Term Plan

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Term 1	<p>Number and place value To represent 4 digit numbers (concrete-place value counters). To find 1, 10, 100 or 1000 more than a given number (concrete). To recognise the place value of each digit in a four digit number. Order numbers beyond 1000. Compare numbers beyond 1000.</p>	<p>Addition and Subtraction To add four digit numbers (no regrouping) To add with regrouping in the 100s To add with regrouping in the 100s, 10s and 1s To add with regrouping in the 1000s, 100s, 10s and 1s To identify common misconceptions in column addition</p>	<p>Addition and Subtraction To subtract up to 4 digit numbers (no regrouping) To subtract with regrouping in hundreds and thousands To subtract with regrouping in hundreds, thousands, tens and ones To subtract with numbers that have zeros To identify common misconceptions in column subtraction</p>	<p>Multiplication and division To multiply by ten using place value grids and dienes To multiply two digit numbers by a one digit number (see year 3 exemplification) To multiply three digit numbers by one digit number To multiply two digit by two digit number</p>	<p>Multiplication and division To use number bonds for factor and products (To solve missing number sentences) To make the link between sharing, arrays and short division. To use known facts to derive facts involving 3 digit numbers (If I know $2 \times 3 = 6$ I can work out that $600 \div 3 = 200$) To use the distributive property strategy to divide 'friendly' numbers.</p>	<p>Measurement – Time To convert units of measure. To convert time between analogue and digital clocks (12 hour and 24 hour). To solve problems involving converting time. To calculate time durations that pass through the hour.</p>	
Term 2	<p>Fractions, decimals and percentages To identify equivalent fractions Show equivalent fractions pictorially (and calculate equivalent fractions) To compare fractions</p>	<p>Fractions, decimals and percentages To use factors and multiples to recognise equivalent fractions To simplify fractions Add and subtract like fractions (fractions with the same denominator).</p>	<p>Geometry-properties of shape To classify different triangles. To classify different quadrilaterals. To identify lines of symmetry in 2-D shapes presented in different orientations. To complete a simple symmetric figure.</p>	<p>Statistics To interpret and present data in a bar chart To interpret and present data in a time graph To solve comparison problems using information presented (in a range of tables/graphs). To solve sum problems using the information presented (in a range of tables/graphs). To solve finding the difference problems using the information presented (in a range of tables/graphs).</p>	<p>Measurement-length and mass To measure and calculate the perimeter of rectilinear shapes. To find the area of rectilinear shapes (by counting squares). To estimate, compare and calculate measures.</p>	<p>Measurement – volume and capacity To estimate, compare and calculate measures.</p>	<p>Four operations (context: volume, capacity, length, mass)</p>
Term 3	<p>Number and place value Round any number to the nearest 10, 100, 1000. (To round appropriately given context see division strand) To identify and count in negative numbers. To estimate and round numbers using measuring instruments.</p>	<p>Addition and subtraction To round off numbers to the nearest 10 / 100 - To estimate to check answers To add and subtract decimals up to 2 decimal places To solve two step word problems. Use take away and comparing models to solve subtraction word problems.</p>	<p>Multiplication and division To use the distributive law: $32 \times 3 = (30 \times 3) + (2 \times 3) = 90 + 6 = 96$ To use associative law to multiply three numbers To solve problems using scaling To derive multiplication and division facts from three digit numbers To divide a three digit number using short division (Regrouping in tens and ones)</p>	<p>Fractions, decimals and percentages To calculate the fraction of numbers and quantities Recognise and write decimal equivalents of any number of tenths of hundredths Recognise and write decimal equivalents to , ,</p>	<p>Fractions, decimals and percentages. Compare numbers with the same number of decimal places (up to 2 decimal places) Round decimals with one decimal place to the nearest whole number.</p>	<p>Geometry – position and direction To recognise that two right angles make a half turn, three make three quarters and four complete. To describe position on a 2-D grid as co-ordinates.(2,5)</p>	

			To divide a three digit number using short division (Regrouping in tens, ones and hundreds)				
Term 4	Statistics To understand and use a range of scales. To understand the recording of change over time. To record change over time in a range of graphs.	Measurement – money To calculate money in pounds and pence using four operations.	Four operations	Measurement – time To convert units of measure. To convert time between analogue and digital clocks (12 hour and 24 hour). To solve problems involving converting time. To calculate time durations that pass through the hour.	Geometry – properties of shape To identify acute and obtuse angles. To compare and order angles up to two right angles, by size. To compare length and angles to decide if a polygon is regular or irregular.		
Term 5	Number and place value To understand the history of different numeration systems. To read and understand Roman numerals. To understand the place value of decimals and fractions (see learning objectives in these strands).	Addition and subtraction To round off numbers to the nearest 10 / 100 - To estimate to check answers To add and subtract decimals up to 2 decimal places To solve two step word problems. Use take away and comparing models to solve subtraction word problems.	Multiplication and division To recognise factors of a number To multiply decimals	Fractions, decimals and percentages To connect fractions, decimals and measures (using a number line)	Fractions, decimals and percentages To connect fractions, decimals and measures (using a number line)	Geometry – position and direction Describe movements between positions as translations (left, right, up, down) To plot specified points. To draw a polygon. To draw a pair of axes. To use coordinate plotting ICT tools.	
Term 6	Measurement – volume and capacity To estimate, compare and calculate measures	Four operations (context: volume and capacity)	Measure – Length and mass To estimate, compare and calculate measures	Four operations (context: length and mass)	Geometry – properties of shapes To compare and classify geometric shapes based on their properties and sizes. To use a tree diagram to classify shapes	Statistics To record data into Venn and Carroll diagrams.	Measurement – time To convert units of measure. To convert time between analogue and digital clocks (12 hour and 24 hour). To solve problems involving converting time. To calculate time durations that pass through the hour.

Throughout (and when children are ready): To use the bar model to represent word problems, Problem solving (4 types)

Year 5 Maths Medium Term Plan

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Term 1	<p>Number and place value To represent 6 digit numbers (to 1 000 000) (concrete- place value counters). To recognise the place value of each digit in a six digit number. To compare & order numbers to at least 1 000 000 To understand decimals and fractions (Revising in Term 6) Recognise thousandths and relate them to tenths, hundredths and decimal equivalents.</p>	<p>Addition and Subtraction To add four digit numbers (regrouping in the 1000s, 100s, 10s and 1s) To identify common misconceptions in column addition To subtract four digit+ numbers (regrouping in the 1000s, 100s, 10s and 1s) To identify common misconceptions in column subtraction</p>	<p>Multiplication & division Divide whole numbers by 10,100 and 1000 Divide decimals by 10, 100 and 1000 To divide by powers of 10 (in scale drawings). To divide by powers of 1000 (in converting between units such as km and m) To multiply whole numbers& decimals by 10, 100, 1000</p>	<p>Multiplication and division To solve problems involving multiplication. To multiply numbers up to four digits by a one digit number To multiply numbers up to four digits by a two digit number Divide numbers up to 4 digits by a one digit number (with remainders)</p>	<p>4 operations To solve multistep word problems using the bar model. Solve problems involving number up to three decimal places. To find the missing value.</p>	<p>Measure – Time To solve problems involving converting units of time</p>	
Term 2	<p>Fractions, decimals and percentages. To identify equivalent fractions (including tenths and hundredths) To compare and order fractions (whose denominators are multiples of the same number)</p>	<p>Fractions, decimals and percentages. To calculate fractions of numbers and quantities. Read and write decimal numbers as fractions.</p>	<p>Geometry-properties of shape To identify 3-D shapes from 2-D representations (including cubes and other cuboids). To sort regular and irregular polygons. To estimate and compare angles. (obtuse, acute, reflect, right angle)</p>	<p>Measurement-length and mass To convert between different units of metric measure. To measure and calculate the perimeter of composite rectilinear shapes.</p>	<p>Measurement-volume and capacity To calculate and compare the area of rectangles. (cm² and m²) To estimate the area of irregular shape. To estimate and measure capacity. To estimate volume.</p>	<p>4 operations volume, capacity, length and mass. To solve multistep word problems using the bar model. To find the missing value. To use all four operations to solve problems involving measure. To solve missing measure questions when presented algebraically.</p>	<p>Statistics To solve comparison problems using information in a line graph. To solve sum problems using information in a line graph To solve difference problems using information in a line graph.</p>
Term 3	<p>Number and place value <i>To recognise and describe linear number sequences.</i> <i>To find the term-to-term rule</i> <i>To interpret negative numbers. Counting forward and backward.</i> <i>To round numbers to the nearest 10, 100, 1000, 10 000 and 100</i></p>	<p>Addition and subtraction To round off numbers to the nearest 10. To round off numbers to the nearest 100. To round decimals with 2d.p to the nearest whole number. Or to one decimal place. To subtract decimals up to 2 decimal places</p>	<p>Multiplication and division To identify common factors of two numbers. To use number bonds for factor and products and to identify missing factors (using fractions and decimals) To know prime numbers, prime factors and composite numbers.</p>	<p>Fractions, decimals and percentages. To add and subtract fractions with the same denominator (see year 4) To add and subtract fractions with denominators that are multiples of the same number.</p>	<p>Fractions, decimals and percentages. To convert mixed numbers to improper fractions (and back)</p>	<p>Fractions, decimals and percentages. To multiply fraction and mixed numbers by a whole number. (use diagrams to support)</p>	

	<i>000 (To round appropriately in context see division strand)</i>	To subtract money using the column method To add decimals up to 2 decimal places To add money using the column method To use part, part whole to add money (will review in term 4, week 1)	To recognise and use squared and cubed numbers				
Term 4	Measure-money <i>To use part, part whole to add money</i>	Four operations To solve multistep word problems using the bar model. To find the missing value.	Measurement time To solve problems involving converting units of time	Geometry –position and direction To reflect the position of a shape To reflect the position of a shape in all four quadrants (extension) To translate the position of a shape To translate the position of a shape in all four quadrants (extension)	Geometry –properties of shape. To draw given angles and measure them in degrees. (using a protractor) To identify angles at a point and one whole turn. To identify angles at a point on a straight line. To identify missing lengths and angles. (using angle sum facts)		
Term 5	Number and place value <i>To count in steps of powers of 10 up to 1 000 000 Read Roman numerals (See progression year 4) To solve problem including all of the above.</i>	Addition and subtraction To subtract measures using the column method To add measures using the column method. To solve multistep word problems using the bar model.	Multiplication of division To understand the law of distributivity To use the distributive property strategy to divide ‘friendly’ numbers. To interpret remainders appropriately for the context (rounding up or down- see year 6 exemplification) To interpret non-integer answers to division by expressing results in different ways Reviewing skills of: To multiply numbers up to four digits by a one digit number To multiply numbers up to four digits by a two digit number Divide numbers up to 4 digits by a one digit number (with remainders)	Fractions, decimals and percentages Read and write decimal numbers as fractions. To add and subtract decimals	Fractions, decimals and percentages Recognise thousandths and relate them to tenths, hundredths and decimal equivalents.	Fractions, decimals and percentages To know that a percent means out of 100 & percent symbol. Write percentages as a fraction with denominator 100. Write percentages as a decimal. Solve problems which require knowing percentage and decimal equivalence of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of 10 or 25. To convert fractions to percentages	
Term 6	Statistics To complete, read and interpret information in tables (including time tables) To make links with coordinates	Geometry-position and direction To use a 2-D grid and coordinates in the first quadrant	Geometry properties of shape To draw lines to the nearest mm. To label parallel lines and right angles.	Measurement-volume and capacity To measure and calculate the perimeter of composite rectilinear shapes	Measurement length and mass To use approximate equivalences between metric and imperial units.	Measurement-money To solve problems involving money using the four operations.	Four operations (measurement) To use all four operations to solve problems involving measure (for example, length,

	To choose the appropriate representations of data.	To use a 2-D grid and coordinates in all four quadrants. (extension) Revision of translation.	To identify and use diagonal and parallel lines. Use the properties of rectangles to deduce related facts and find missing lengths and angles.		To use multiplication and division to inter scale and calculate changing rates. Review metric measures.		mass, volume, money) using decimal notation, including scaling.
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Throughout (and when children are ready): To use the bar model to represent word problems, Problem solving (4 types)

Year 6 Maths Medium Term Plan

Term 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	
	SDD and KENT TEST Number and place value -read, write and say numbers up to 10,000,000 -partitioning -ordering -rounding -doubling and halving (including decimals) -prime, factors, multiples, squared and cubed numbers -roman numerals		Positive and negative numbers -using positive and negative numbers in real life contexts -adding and subtracting -problem solving with negative numbers	Swattenden	Adding and subtracting -column addition and subtractions -estimation to check answers -solving word problems and using correct vocab for adding and subtracting -explaining and reasoning -application of number knowledge in adding and subtracting calculations/problems		Mental methods for multiplying and dividing -x and ÷ by 10, 100 and 1000 (including decimals) -using the inverse and number facts to solve problems ie $24 \times = 2.4$	
Term 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
	Multiplication -grid -expanded column -compact column -solving problems		Division -short division -long division -solving problems		Four operations -associated vocab -inverse -problem solving -estimating	BODMAS and algebra -solving problems -writing formula	Fractions -finding fractions of shapes and numbers -proper, improper and mixed numbers	(3 days) Fractions -simplifying and finding equivalents -ordering (and 2 days after half term)
Term 3	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6		
	(2 days) Fractions -simplifying and finding equivalents -ordering	Fractions -adding and subtracting -multiplying and dividing	Fractions and decimals -converting between fractions and decimals	Fractions, decimals and percentages -converting between fractions, decimals and percentages -finding percentages of amounts	Percentage -percentage increase and decrease -problems solving using FDP	Angles -measure and draw accurately -types of angles -find missing angles (including within shapes)		
Term 4	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6		
	Geometry –position and directions -coordinates -translation -reflection -symmetry -rotation	Geometry -shape -properties of 2D shapes -types of lines (parallel etc) -circles -properties of 3D shapes	Geometry -perimeter -area -volume	Measure –time and units of measure -reading scales -time (reading clocks and intervals) -calendar and time problems -selecting appropriate units of measure	Measure –mass, length and capacity - converting between units of measure -solving problems	Data handling -types of graph -interpreting -pie charts		
Term 5	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6		
	Number and place value -ratio and scaling	REVISION	REVISION	(4 days) REVISION	KS2 SATs week	Problem solving and data handling		
Term 6	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8

