Grateley Primary School

Maths Medium Term Plan – Year 1 and 2

Term: _Autumn_____

Week	Date	Year	Block / Focus	Prior Objectives	Year group objectives	Big Ideas, Problem Solving Activities
1	7.9.2020	1	Number and Place Value	ELG Children count reliably with numbers from 1-20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract 2 single digit numbers and count on or back to find the answer Order numbers up to 30 starting from any number between 1 and 10. Use a context to solve problems involving one more and one less	Count to at least 50 forwards, beginning with 1 and backwards from 10 * Count in 10s to 50. Identify and represent numbers using objects, mathematical manipulatives and pictorial representations. Given a number, identify one more and one less by counting out objects and augmenting or reducing the group by one. Use the language of one more than 6 is 7; one less that 7 is 6. Read numbers from 1 to 20 in numerals	• Revise pupils can rote count and count objects accurately and fluently from 1- 10, then 20. On-going practice is needed for counting – pay attention to correct pronunciation – especially "teen" numbers. checking understanding and use of • *one to one principle-assigning one number name to each object that is counted, • Pay particular attention to 11, 12, 13, 15 as the number names don't follow a set pattern. stable order principle- when counting the numbers have to be said in a certain order • the abstraction principle- anything can be counted including things that cannot be touched including sounds and actions • revise counting paying attention that numbers must be said in a particular order • the cardinal principle- number name assigned to the final object in a group is the total number of objects on that group • the order- irrelevance principle- the order we count a group of objects is irrelevant. There will still be the same number

		2		Y1: Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Y1 Identify and represent numbers using objects and pictorial representations, including the number-line, and use the language of: equal to, more than, less than (fewer), most, least Compare and order numbers from 0 up to 100, use < , > and = signs	Identify, represent and estimate numbers using different representations including the number line Read and write numbers to at least 100 in numerals and in words	• Use the number-line with structured resources to develop understanding of how numbers relate to one another and to support ordering. e.g. Explore place value patterns such as 7,17,27.... and 57,47,37..... On a number-line marked in multiples of 10 • explore 'nearly numbers' such as those ending in '8' or '9'. E.g. '18 is close to (or nearly) 20'.
2	14.9.2020	1	Number and Place Value	ELG Children count reliably with numbers from 1-20, place them in order and say which number is one more or one less than a given number	Read numbers 1-20 in numerals Use a context to solve problems involving one more and one less Sequence events in chronological order using language such as before and after, next and first (M)	• Check use and understanding of key vocabulary: • *more than / less than/compare *before / after / order * number bond / pair • *altogether / total / combine / left • number digit • All teen numbers • Are able to write with correct formation all units and numbers to 20
		2		Y1: Identify and represent numbers using objects and pictorial representations, including the number-line, and use the language of: equal to, more than, less than (fewer), most, least. Read and write numbers to at least 100 in numerals and words recognise the place value of each digit in a two-digit number use place value and number facts to solve problems.	Identify, represent and estimate numbers using different representations including the number line	• Use the number-line with structured resources to develop understanding of how numbers relate to one another and to support ordering • Explore place value patterns: 7,17,27. ad 57,47,37. • On number lines marked in multiples of 10, explore nearly numbers such as those ending in 8 or 9

3	21.9.2020	1	Addition and Subtraction	ELG Using quantities and objects, they add and subtract 2 single digit numbers and count on or back to find the answer ELG 11 They solve problems involving doubling, halving and sharing	Introduce the number-line with practical objects to develop understanding of how numbers relate to one another and to support ordering. Make collections of 10, 20 and 30 objects. read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs	• Can independently use a range of resources to build a concrete number line showing consecutive numbers to 10 and then to 20 explaining 'one more' and 'one less' using the resources: numicon multi links • use appropriate mathematical symbols -+= • Connect mathematical symbols to problem solving • Explore reasoning skills.
		2		Y1: Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number	represent and use number bonds and related subtraction facts within 20 add and subtract one-digit and two-digit numbers to 20, including 0	• Revise representations for NPV and recording calculation eg number sentences and 2 part 'cherry' and bar models and number lines • Use adding and subtraction in 2,5,10 jumps on number line • Revise patterns of adding and subtraction in 2,5,10
4	28.9.2020	1	Addition and Subtraction (mental)	ELG Using quantities and objects, they add and subtract 2 single digit number and count on or back to find the answer	Given a number, identify one more and one less by counting out objects and augmenting or reducing the group by one. Use a context to problem- solve with number bonds to 5. solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9.	• Encourage pupils to count on from a number and back from a number with small numbers relating to adding and subtracting • Use practical resources to demonstrate understanding mental calculation • The value of a digit is determined by its position in a number.
		2		Y1: Identify and represent numbers using objects and pictorial representations, including the number-line, and use the language of: equal to, more than, less than (fewer ,most ,least)	use place value and number facts to solve problem Given a number, identify one/ten more and one/ ten less (include writing as a number sentence)	• Solve problems involving add/ sub of tens Revise and develop fluency in solving problems that involve • addition and subtraction to 20, including revision of all number bonds of numbers to 10 using concrete objects and pictorial representations.

5	5.10.2020	1	Addition and Subtraction Context: money	ELG: Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.	Recognise and know the value of different denominations of coins recognise and use symbols for pounds (£) and pence (p); combine amounts make a particular value find different combinations of coins that equal the same amounts of money	• Use 1p coins to represent number making links with number representations using. Addition subtraction context - to 50 • Sort coins into different types noting similarities and differences
		2		Recognise and know the value of different denominations of coins and notes	Find different combinations of coins that equal the same amounts of money Recognise and use symbols for pounds (£) amounts to make a particular value. solve problems in a practical context involving addition and subtraction of money of the same unit	• Use 10p and 1p to represent place value and make links with money. Representations-to 100 • Recognise and know the value of different denominations of and pence (p); combine coins and notes
6	12.10.2020	1	Addition and Subtraction Context: Length	ELG Using quantities and objects, they add and subtract 2 single digit number and count on or back to find the answer	Compare and describe lengths and heights using non-standard units. Use comparative language long/ short; longer/shorter; tall/short; double/half. Solve problems in a practical context compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/ short, double/hal] mass / weight capacity and volume time	• Use everyday opportunities to compare lengths and height using accurate comparative language e.g. taller than/ shorter than; same length as, same height as; • Link the number line model with the use of rulers and tape measures • Explore lengths using non standard units of measurement
		2	Addition and Subtraction Context: Length	Y1: Revise the language for lengths and height (long/ short; longer/ shorter; tall/short)	Compare and order lengths using appropriate standard units (cms). compare and order lengths, mass, volume/capacity and record the results using >, < and =	• Link the number line model with the use of rulers and tape measure • Using standard units of measurement -metre, rulers

7	19.10.2020	1	Addition and Subtraction Real life context consolidate	ELG 11 Using quantities and objects, they add and subtract 2 single digit numbers and count on or back to find the answer ELG 11 They solve problems involving doubling, halving and sharing	Use a context to problem- solve with number bonds to 5 and 10	• Can count out accurately any number to 10 and partition in more than one way showing results with concrete resources and pictorial recording. • Revise the use of mathematical symbols -+= in correct sequences • Revise problem solving language corresponding to particular operations
		2	Addition and Subtraction Real life context consolidate	Find everyday opportunities to read the time to the hour and half past the hour- draw hands on a clock to show these times (Y1) Y1: Identify and represent numbers using objects and pictorial representations, including the number-line, and use the language of: equal to, more than, less than (fewer), most, least.	Given a number, identify one/ten more and one/ ten less (include writing as a number sentence) Use place value and number facts to solve problems	• Solve problems involving add/ sub of tens Revise and develop fluency in solving problems that involve • addition and subtraction to 20, including revision of all number bonds of numbers to 10 using concrete objects and pictorial representations
Half Term						
8	2.11.2020	1	Multiplication and Division	ELG 11 They solve problems by doubling, halving and sharing	Count reliably in 2s. Share objects equally by counting how many in each groups 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.	• Link counting in 2s to grouping objects and to the pattern of numbers on a number-line. • Solve problems involving pairs of objects, groups of 2 using pictorial recording. • Rehearse language of how many groups of 2 are there?-there are3 groups of 2- • practice putting a group[s of objects not 'equal size groups' and counting how many groups
		2		Y1: Count in multiples of 2s, 5s and 10s.	Count reliably in 2s, 5s and 15 lessons 10s from zero. Introduce counting in 3's from zero (multiples) Construct arrays with concrete objects- 2x5 =5x2 (commutatively) Record	• Link counting in 2s, 5s ,10s to grouping objects and to the pattern of numbers on a number-line. • Give opportunity for children to record multiplication calculations/ counting in multiples in arrays

9	9.11.2020	1	Multiplication and Division	ELGs 11 They solve problems by doubling, halving and sharing	Y1: 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.	Link counting in 2s, 5s ,10s to grouping objects and to the pattern of numbers on a number-line. Solve problems involving groups of 2, 5 and 10 objects using pictorial recording. Rehearse together the language of 'how ,many groups are there? There are 3 groups of 2 (5,10)
		2		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	Construct arrays with Fractions/ concrete objects. Notice that 2 x 5 = 5 x 2 etc. (Commutativity). Record pictorially. Develop the concept of sharing and grouping into different sized groups (not just 2's)r ecall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	Link counting in 2s, 5s ,10s to grouping objects and to the pattern of numbers on a number-line. Solve problems involving groups of 2, 5 and 10 objects using pictorial recording. Rehearse language of 'how many groups of 2 are there? There are 3 groups of 2,5 10

10	16.11.2020	1	Fractions Shapes and number (YR2) Time	ELG They solve problems involving doubling, halving and sharing	recognise and name common 2D shapes including squares and circles Recognise and name a half as one of two equal parts of a quantity recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity recognise and use language relating to dates, including days of the week, weeks, months and years tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.	• -practice putting a group[s of objects not 'equal size groups' and counting how many groups • find half of shapes by folding and quantities by sharing • Use lady birds templates, sharing food in plates equally in 2,5,10 groups • Count out amounts and find different ways of sharing them into groups evenly and unevenly
		2		Y1: Recognise find and name a half as one of two equal parts of an object, shape or quantity.	Recognise, name and write a half as one of two equal parts of a quantity Measurement: tell and write the time to five minutes, including quarter past/ to the hour and draw the hands on the clock face to show these times know the number of minutes in an hour and the number of hours in a day compare and sequence intervals of time write simple fractions, for example 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2 recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity	• Identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line • Identify 2-D shapes on the surface of 3-D shapes, for example a circle on a cylinder and a triangle on a pyramid. • Recognise, find, name and write fractions as equal parts of a shape (link to symmetry and folding). Focus on 1⁄2, 1⁄4 , 2/4 = 1⁄2

11	23.11.2020	1	Number Place Value	ELG Children count reliably with numbers from 1-20, place them in order and say which number is one more or one less than a given number	Count back from any given number between 11-20 to zero Given a number, identify one more and one less to 20 count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward	• Read numbers from 20 to 50 • Order numbers up to 50 starting from any number between 1 and 10. • Use partitions of 5,6 and7to derive associated subtraction facts. • Use partitioning and part-whole diagrams to show number bonds for all
		2		Count in 2's to 20 modelling on number line Count in 10's to 100 on numberline	Count in steps of 10 from any number forward or backwards, Read and write numbers to at least 100 in numerals and in words Compare and order numbers from zero up to 100 using <, > and =.	• Use resources to show partitioning any two -digit number into different combinations of tens and ones, explaining their thinking
12	30.11.2020	1	Geometry	ELG: They explore characteristics of everyday objects and shapes and use mathematical language to describe them.	Recognise and name common 2D shapes including squares and circles describe position, directions and movements, including whole, half, quarter and three-quarter turns.	• Revise geometrical language, corner sides, etc • Sort shapes by properties
		2		Recognise and name common 2D and 3d shapes including squares and circles	Identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line Identify 2-D shapes on the surface of 3-D shapes, for example a circle on a cylinder and a triangle on a pyramid. use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).	• Identify and sort shapes using property grids • Review geometric mathematical vocabulary for 2D and 3D shapes- vertices, face, corner

13	7.11.2020	1	Addition and Subtraction	ELG Using quantities and objects, they add and subtract 2 single digit numbers and count on or back to find the answer	read, write and interpret mathematical statements to 10. Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.	Build on and make links with Unit 1.1 and Unit 1.2
		2		Y1: Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.	Solve one-step problems that involve addition and subtractions, using concrete objects and pictorial representations including on the number-line, bridging through 10 using number bonds of all numbers, where appropriate add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • a two-digit number and 1s • a two-digit number and 10s • 2 two-digit numbers • adding 3 one-digit numbers	• Use structured number-lines to record addition and subtraction number sentences revising calculation within 20 using number bonds (not counting in ones on fingers etc). Then... Adding 2 single digit numbers (bridging through ten) 8+5 • A 2-digit number and ones (no bridging +/-) e.g. 24 + 5, 38 • 6 A 2-digit number and ten (+ / -) e.g. 34 + 10, 68 - 10
14	14.11.2020	1	Addition and Subtraction Yr 2 Statistics	ELG They solve problems involving doubling, halving and sharing Using quantities and objects, they add and subtract 2 single digit numbers and count on or back to find the answer	Count back from any given number between 11-20 to zero read, write and interpret mathematical statements to 10 Solve one-step problems that involve addition and subtractions, using concrete objects and pictorial representations.	• Relating numbers to 5 and 10 helps develop knowledge of the number bonds within 20. For example, given 8 + 7, thinking of 7 as 2 + 5, and adding the 2 and 8 to make 10, then the 5 to 15. This should then be applied when calculating with larger numbers. • Solve one-step problems that involve addition and subtraction using concrete objects and pictorial representations, and missing number problems such as 7 =Δ-9
		2		Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.	construct simple pictograms, tally charts, block diagrams and tables . Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity	• Generate and interpret data charts hard copy • Generate and interpret data chart using 2simple and computers IWB
Holiday						