This document should be used alongside the Hampshire Mathematics Planning Tool for mathematics. The concepts, knowledge and skills within National Curriculum Strand have NOT been listed in order. They are there to support bespoke planning to meet the needs of individual pupils. An individual plan would be made up from an appropriate number of different National Curriculum strands depending on the needs of the pupil. It might be appropriate to use some elements from the Year 2 and or Year3 planning tool when developing an individual bespoke plan.

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| **Year 1: Number and Place value**  **Review: (Date)** | | | | |
| **National Curriculum strands** | | | **Concepts, knowledge and skills focus (select)** | **Year 1 National Curriculum expectations** |
| Counting | | * Oral counting forwards * Oral counting backwards * Number sequences (inc odd/even) * Estimating and counting a set of objects | *Can say the number sequence from 1-10 (1-20; 1-30; 1-100)*  *Can say the number sequence backwards from 10-1 (20-1; 30-1; 100-1)*  *Within the range 1- 10 (1-20; 30-1;1-100) can count forwards from a given number to another given number*  *Within the range 10- 1 (20-1; 30-1; 100-1) can count backwards from a given number to another given number*  *Can say the number after a given number in the range 1-10 (1-20; 1-30; 1-100) without dropping back to 1*  *Can say the number before a given number in the range 1-10 (1-20; 1-30; 1-100) without counting up through all numbers first*  *Recognises patterns in the number sequences from 1-20 (1-30; 1-100) and uses this to say them/ self-correct*  *Can find 10 more than any given number U +10 = ? (teen numbers); (10-20;)*  *Points to or moves objects when counting*  *Can find 1 less than any number up to 10*  *Can count accurately up to 3/ 4 (10; 20; 30) objects*  *Can find 1 less than any number up to 20*  *Can count for a short sequence in multiples of 2(5)*  *Uses step counting to count larger groups of objects (2s, 10s)* | count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number |
| count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens |
| given a number, identify one more and one less |
| Comparing Numbers | | * Symbol order * Number line model * Cardinality * ordinality | *Can use a structured (empty) number line to compare position of two numbers 0-10; (0-20; 0-30)*  *Can say whether two numbers are close together or far apart (through oral counting or number line model) 0-10 (0-20; 0-30)*  *Can use language of ‘more/ less’ to describe two sets of objects with links to > < signs*  *Can order numbers 1-10 (1-20; 1-30)*  *Can use structured resources eg numicon to compare numbers 1-10 (1-20, 1-30+)*  *Can use a structured (empty) number line to compare position of two numbers related to multiples of 10*  *Can identify first, second, third and last in a line of objects*  *Can use language of ordinality up to tenth (twentieth*) | use the language of: equal to, more than, less than (fewer), most, least |
| Identifying, Representing and Estimating Numbers   * counting objects * tens arrays * number lines | | | *Makes a reasonable estimate up to 10 (20)*  *Can mark numbers on structured number lines (1-10; 1-20; 1-30) showing awareness of position of multiples of 10*  *Can subitise small numbers in different ways 3-7 (8-10)*  *( also in Addition and subtraction/Number bonds)*  *Can use tens frame to represent same number in different ways and compare different numbers using two tens arrays* | identify and represent numbers using objects and pictorial representations including the number line |
| Reading and Writing Numbers  (including Roman Numerals) | | | *Can read numbers 1-5 (1-10; 1-20)*  *Can link number words with symbols and sets of objects*  *Can recall and write accurately numbers 1-10 (1-20)*  *Can write number words ten, six, three, seven ; two, four, five, nine; one, eight, twenty; teens numbers.* | read and write numbers from 1 to 20 in numerals and words. |
| Understanding Place Value | * cardinality * ordinality * number line imagery * vocabulary: ‘teen’ and ‘ty’ | | *Can talk about all teen numbers as ‘ten and…’*  *Can use a range of structured resources eg straws, bead strings, place value cards, Numicon to demonstrate teens numbers*  *Can use a range of structured resources eg straws, bead strings, place value cards, Numicon to demonstrate 11-20 (20-30)*  *Can confidently find teens numbers on a structured number line relative to ‘10’*  *Can confidently find 2 digit numbers to 30 on a structured number line relative to multiples of 10*  *Can use ‘teen’ and ‘ty’ vocabulary accurately eg 14, 40*  *Can continually ‘add 10’ to any one digit number recognising the oral counting pattern eg 7,17,27,37 using structured resources eg numicon, dienes, place value cards to model the numbers and pattern*  *Can draw an empty number line and mark where 2 digit numbers would be and explain the position compared to 10 and 20. Understands the significance of the order of digits ie 14 and 41 are in different positions on a number line related to cardinal value ( tens and ones) and ordinal value ( 14 = 10 and 40 more; 41= 40 and 1 more)*  *Can continually ‘subtract 10’ from a 2 digit number recognising the oral counting pattern eg 37,27,17,7 using structured resources eg numicon, dienes, place value cards to model the numbers and pattern* | Year 1 Non statutory guidance:  *‘Pupils begin to recognise place value in numbers beyond 20 by reading , writing, counting and comparing up to 100 supported by objects and pictorial representations’* |
| Problem Solving | | | Research evidence suggests that developing concepts and skills in understanding number and calculation (eg number facts)through problem solving is more effective than working with ‘number’ only as an abstract concept.  **Example of types of problems used:** | *No statements in Number and Place Value* |

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| **Year 1: Addition and subtraction**  **Review: (Date)** | | | |
| **National Curriculum strands** | | **Concepts, knowledge and skills (select)** | **Year 1 National Curriculum expectations** |
| Number Bonds | * Subitising * Deriving and recalling addition and subtraction facts * Knowing doubles and corresponding halves   Developed through problem solving contexts. | *Can subitise small numbers in different ways 3-7 (8-10; 11-20) using counting objects and structured resources eg numicon*  *Can use bar models and 2 part diagrams to show partitions of all units numbers (10; 11-20)*  *Can record different partitions of numbers 3-7 (8-10; 11-20) using + and = signs*  *Can use bar models and 2 part diagrams to show partitions of all units numbers (10; 11-20) identifying the related subtraction fact with each addition fact*  *Understands X +1 can be interpreted as ‘next number’ and ‘1 more’ without the need to count all.*  *Understands teen number subtract 10= units digit and can use structured resources to explain eg numicon, place value cards*  *Understands X -1 can be interpreted as ‘number before’ and ‘1 less’ without the need to take away and then count all. (0-5; 0-10; 0-20)*  *Understands the pattern linking number bonds to 10 with number bonds to 20 ( addition)*  *Understands the pattern linking number bonds to 10 with number bonds to 20 ( addition and subtraction)*  *Understands X +U where X=10 can be calculated using PV without the need to count all.*  *Can use structured resources to show addition facts of all units numbers (to 10; 11-20)*  *Understand the term ‘double’ in practical contexts, double 1-3 (4-7; 8-10)*  *Understand the term ‘half’ in practical contexts, even numbers: 2,4,6,8,10*  *Knows doubles of all numbers 1-3 (4-7; 8-10) and can show using resources and on a bar model*  *Knows halves of all even numbers to 10 and can show using resources and on a bar model* | represent and use number bonds and related subtraction facts within 20 |
| Mental calculations   * Using facts to estimate and check answers * Using counting (on/back) to solve calculations * Use of inverse | | *Use recall of number bonds to check solutions (addition) 3-7 (8-10; 11-20)*  *Group calculations into solutions > < then = to 10*  *Use recall of number bonds to check solutions (subtraction) 3-7 ( 8-10; 11-20)*  *Uses inverse to solve missing box calculations 3-7 (8-10; 11-20)*  *Use known fact to solve related fact eg if 3+4= 7 then 3+5 must be 8*  *Identify calculations that can be worked out easily with counting forwards/ backwards ie +/1 +/2 +/-3* | * add and subtract one-digit and two-digit numbers to 20, including zero * read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs   (appears also in Written Methods)   * show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot |
| Written methods   * Say, do and write when calculating * Use symbols +/-/= * Inverse * Commutativity * Relate calculations to problem context | | *Use concrete resources to model and record addition and subtraction calculations (U+/-U) using +/- and = signs*  *Uses structured number lines to show addition calculations (U+U)*  *Explain and use concrete resources to model commutativity with addition*  *Use structured number lines to show subtraction calculations (U- U)*  *Explain using concrete resources that subtraction is not commutative eg 9-6/ 6-9*  *Use structured number lines to show addition calculations (TU+U) bridging through 10*  *Use diagrams eg bar models and concrete resources to explain inverse*  *Use structured number lines to show subtraction calculations (TU-U) bridging through 10*  *Identify addition number sentence to solve a simple word problem 3-7 (8-10; 11-20)*  *Identify subtraction number sentence to solve a simple word problem 3-7 (8-10; 11-20)* |
| Inverse operations, estimating and checking answers | |  |  |
| Problem solving | | *Identify number sentence needed and show solution using concrete objects*  *Identify number sentence needed and show solution on a number line and a bar model*  *Use bar models to solve missing box calculations eg 6+?=10; 9= 11-?*  *Use bar models to find all possibilities eg 8= ?+?*  **Example of types of problems used:** | solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as  7 = \* - 9 |

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| **Year 1:Multiplication and Division**  **Review: (Date)** | | | |
| **National Curriculum strands** | **Concepts, knowledge and skills (select)** | | **Year 1 National Curriculum expectations** |
| Multiplication and Division Facts   * Counting in steps forwards * Vocabulary of: ‘groups of’ * Using arrays * Using number lines * Using bar models | *Can use counting objects to put into groups of 2 (10, 5).*  *Can count in 2s to 10*  *Can count in 2s to 20*  *Can organise a multiple of two (10, 5) into an array using counters/ objects with adult support*  *Can count in 10s (5s) to 50*  *Can count in 10s to 100*  *Can identify how many groups of 2 (10,5) there are in a collection of objects*  *Can describe an array in two ways: eg 4x2 and 2x4*  *Can relate doubles of a number to 2x using a bar model*  *Can relate half a number to X÷ 2 using a bar model* | | *count in multiples of twos, fives and tens*  (copied from Number and Place Value) |
| Mental Calculations |  |  | N/A |
| Written Calculations   * Pictorial recording * Using signs and symbols | *Can talk about and draw pictures to show groups of objects 2s/ pairs (10s, 5s)*  *Can show repeated groups of 2 (10,5) on a structured number line*  *Can create an array with objects to show multiples of 2 (10,5)*  *Can show counting back in 2s (10s, 5s) on a structured number line*  *Can use the vocabulary and symbols to describe and record multiplication number sentences x2 (x10, x5)*  *Can read and interpret the symbols X and = to solve multiplication number sentences*  *Can read and interpret the symbols ÷ and = to solve division number sentences* | | N/A |
| Problem solving | *Can use repeated addition 2s (10s, 5s) to solve simple multiplication problems*  *Can use repeated subtraction in 2s (10s, 5s) to solve simple grouping problems*  **Example of types of problems used:** | | 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 |

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| **Year 1: Fractions**  **Review: (Date)** | | |
| **National Curriculum strands** | **Concepts, knowledge and skills (select)** | **Year 1 National Curriculum expectations** |
| Recognising Fractions   * Shape * Number * Time * Length * Capacity and volume | Can use objects and explain that sharing an even set of objects equally between two results in two groups of equal size  Can show that sharing odd numbers of objects between two results in one left over  Can show half of shapes by folding accurately and labelling each part as a half  Draws pictures and uses diagrams to show halves (quarters) inc bar models  Can recognise half an hour as half of a clock face linked to ‘half past the hour’  Understands the difference between sharing between two and equal sharing between two  Recognises halves ( and not halves) in length  Can recognise when a part is not a half (quarter) in number and explain why  Recognise and use vocabulary of less than/ more than half, half full  Can show quarters of shapes by folding in half and half again accurately and label each part as a quarter  Recognise and combine halves of objects to find the number of whole objects  Can write a half as ½ (1/4)  Count in halves using objects to support  Recognise and combine quarters of objects to find the number of whole objects  Can show that a quarter of a set of objects results in 4 groups of equal size  Count in quarters using objects to support  Knows that any one of a group of 4 equal groups is a quarter  Can use a bar model to show half of numbers (quarter of numbers) | * recognise, find and name a half as one of two equal parts of an object, shape or quantity * recognise, find and name a quarter as one of four equal parts of an object, shape or quantity |