Maths Core Expectations

Year 1

Autumn		Spring		Summer	
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Story of 20 (1 more and 1 less)	Bits and pieces (fractions)	Count in jumps	Missing numbers	Add and subtract	Same and different (2D and 3D shapes)
2D shapes	Measures	Measures	Shapes (1 week only)	Measures	Multiplication and grouping
Symbols	Number bonds	Telling the time (1 week)	Halves and Quarters	Sharing/ fractions	Ordering events
Given a number, I can identify one more and one less. Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs.	Recognise, find and name a half as one of two equal parts of an object, shape. Represent and use number bonds and related subtraction facts within 20.	Identify and represent numbers using pictorial representations including the number line. Tell the time to the hour and half past the hour.	Recognise and name common 2-D and 3-D shapes. solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ▭ – 9. Recognise, find and name a half of a quantity.	Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects. Solve one-step problems involving multiplication and division using pictorial representations and arrays with the support of the teacher. Recognise, find and name a half of a quantity.	Recognise and name common 2-D and 3-D shapes. add and subtract one-digit and two-digit numbers to 20, including zero. solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ▭ – 9.

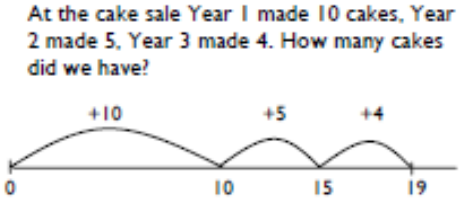
			Recognise, find and name a quarter as one of four equal parts of an object, shape. Recognise, find and name a quarter of a quantity.	Recognise, find and name a quarter as one of four equal parts of an object, shape. Recognise, find and name a quarter of a quantity.	Identify and represent numbers using pictorial representations including the number line.

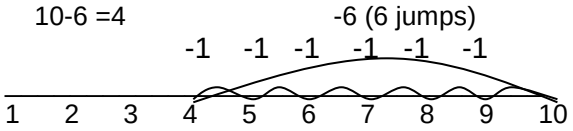
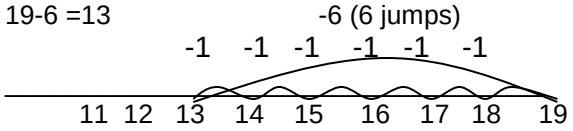
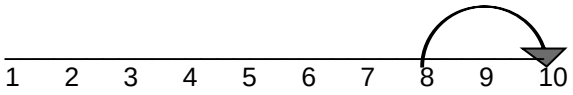
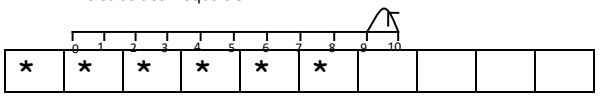
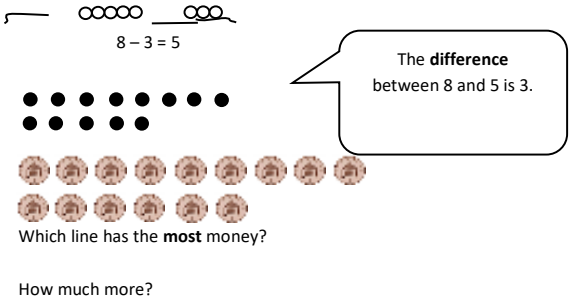
Mastery links

P:\Maths planning aids\Mastery and Greater Depth

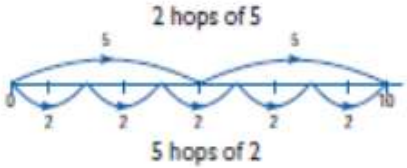
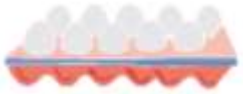
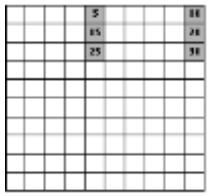
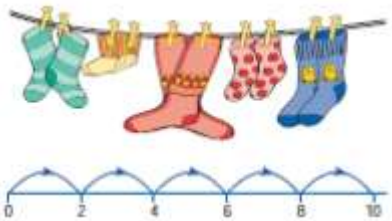
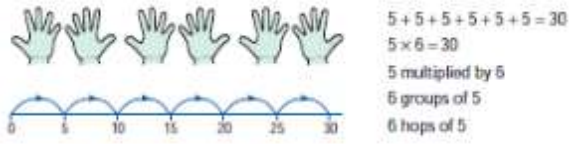
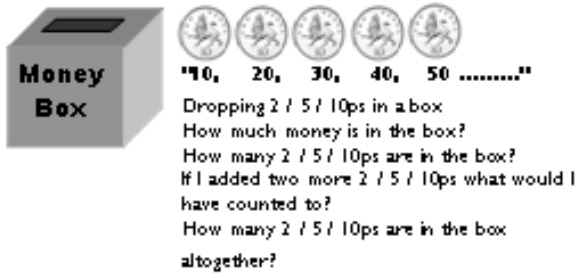
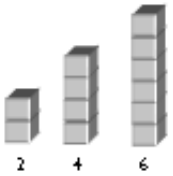
Calculation Policy Pages

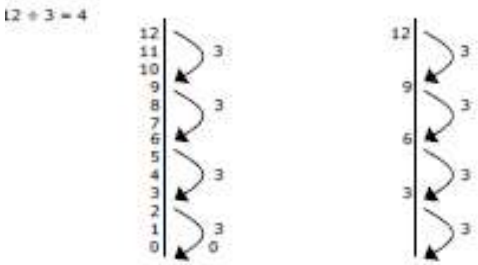
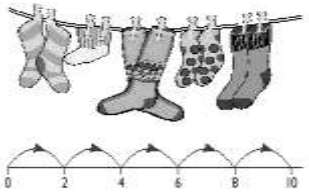
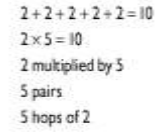
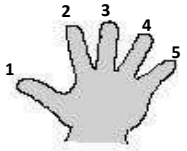
Addition: Phase 1			
Mental Methods	**Written methods**	**Visual images and models**	**Vocabulary**
Count on from larger numbers. Be able to quickly use addition facts to 10. ↓	**Read, interpret and practise writing mathematical statements involving + and = accurately and fluently**. 7 + 3 = 10 (recorded with pictures/numicon)	Understand that addition can be done in any order. Count on from the biggest number.	Add, more, plus, make, sum, total, altogether, score, double, near double, 1 more, 2 more, 10 more. How many more to make? How many more is …

Derive number facts to 20 (and multiples of 10 to 100) ↓ Add 1 and 2 digit numbers to a total of 20. Add three 1 digit numbers. Solve simple word problems involving addition. Count in steps of 2, 5, 10 from any given number, looking at patterns to predict. .	17 + 3 = 20 (recorded with pictures/numicon) 3 + 4 + 7 = 14 (recorded with pictures/numicon) Children start to record on a numberline:  Children are introduced to the idea of 'doing' and 'undoing' to demonstrate subtraction as the inverse of addition. (Ensure pupils begin to recognise place value in numbers beyond 20 by reading, writing, counting and comparing numbers up to 100)	 13 + 7 = 20 7 + 13 = 20    3 + 4 + 7 = 14 Re-arranging numbers to use bonds to 10 to help addition  15 + 5 = 20	than…? How much more is …? Odd/even **Resources** Moveable counting objects, numicon, coat hangers and pegs, flip flaps, beads, number tracks and lines, number fans.
Subtraction	**Phase 1**		
Mental methods	**Written methods**	**Visual models and images**	**Vocabulary**

Be able to quickly use subtraction facts to 10. ↓ Derive subtraction facts to 20 (and multiples of 10 to 100) ↓ Subtract 1 and 2 digit numbers to a total of 20. Solve simple word problems involving subtraction. Count backwards from any given number up to 100. Count back in steps of 2 and 10 from any given number.	**Subtract 1 and 2 digit numbers up to 20 using informal jottings** Begin to record on a number line.   Understanding/experience of finding the difference by comparing 2 lines of objects. Children record drawings: ●●●●●●●● ●●●● Consolidate subtraction as finding the difference. Recognise when numbers are close together or far apart and count on to find the difference. Children record: 10-2 =8 + 2 jumps  Children are introduced to the idea of 'doing' and 'undoing' to demonstrate subtraction as the inverse of addition.	Using moveable objects to physically take-away  1 **less** than 10 is 9 10 **subtract** 1 equals 9  Use a ten frame with different objects. What is missing?  Use different contexts for difference. Make links with the wider curriculum, for example: heights, measuring plants etc.	Subtraction Take away Minus Count back How many? Difference Total Sharing Halving Fewer **Resources:** 100 squares, number games, number lines Ten frames Bead string Practical resources to support calculation.

Multiplication: Phase 1			
Mental methods	**Written methods**	**Visual images and models**	**Vocabulary**

Count in 2s, 10s and 5s. Solve word problems involving multiplication, with teacher support, for example: Share 6 biscuits between two people so that each person has the same number. How many do they have each?	**Recognise and write x in mathematical statements, calculating the answer with the teacher using concrete objects.** Children should be able to distinguish the x from +, - and ÷.  Children could record hops on a number line. Use 'every day' arrays (egg boxes, page of stamps, milk crates, chocolate bars, chocolate boxes, ice cube trays).  Draw on a 100 grid to discuss patterns counting in 2s, 5s and 10s. 	   Children walk to another table to get a 2p coin 4 times. 4 x 2 = 8 Build cube towers by adding two more each time 	Count Double Pairs Groups **Resources** Moveable objects Numicon Hundred grid Number lines Multilink Coins Dienes Counters Washing line Counting stick Bead strings Pegs on hangers Containers Place value arrow cards

Division: Phase 1			
Mental Methods	**Written Methods**	**Visual images and models**	**Vocabulary**
Counting in steps of 1s, 2s, 5s and 10s forwards and backwards from different multiples to develop pattern recognition. Halve numbers to 20. Know halves of multiples of 10 up to 100. Begin to respond rapidly to oral questions such as: *How many lots of 2 in 12?* *Divide 10 by 5*	**Reinforce knowledge of sharing and grouping by using practical examples and begin to record calculations in number sentences using the ÷ symbol with the support of a teacher**. Use informal written methods for calculations through repeated subtraction. Draw pictures. Make use of vertical/horizontal number lines and, as confidence increases, using blank number lines: 	When counting in 2s, 5s or 10s, using visual and kinaesthetic resources to model the count, ask: **Q:** How many 2s / 5s / 10s have we counted? **Q:** How many more 2s / 5s / 10s do we need to count to reach ….? Match groups of Numicon to a given plate. Number line frog jumping in twos. Spider jumps in tens on number grid.   2 + 2 + 2 + 2 + 2 = 10 10 – 2 – 2 – 2 – 2 – 2 = 0 5 hops of 2 Using fingers to represent 1s, 2s etc. 	Division Divide Halving Half/Halve Whole Sharing (½, ¼, ¾) Share Grouping Pairs Left over **Resources** 100 squares, number games, number lines along side practical resources to support calculation