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|  | Place Value | Addition and subtraction | Multiplication and division | Fractions |
| 22-361 | Awareness of number names, e*g I am 3.*Recites some numbers but not correct seq.Sing number songs and rhymes without real understanding of numbers and amounts.Selects a small number of objects from a group when asked, *e.g. give me two.*Creates/experiments with symbols and marks to show ideas of no., *eg. dots to rep candles.* | Understands bigger/smaller and more/less with quantities and generally – comparison but not related to counting, e.g. larger pile of socks than other.Uses some language of quantities – more, a lot, less, not as much.Know that a group of things changes when something is added or taken away. |  |  |
| 30-502/3/4 | Rote chanting of numbers to 10 (without understanding) Uses some number names and number language spontaneouslyKnow that numbers identify how many objects are in a setNumeral recognition to 5Understands cardinality of numbers to 5Beginning to represent numbers using fingers, marks on paper or picturesSequence sets of objects in order to 5Understands more/less is different to bigger/smaller, *e.g. large numeral 5 and small one* | Uses some number names and number language spontaneouslyCompares two groups of object, saying when they have the same amountSeparates a group of three or four objects in different ways – beginning to recognise that the total is still the same |  |  |
| 40-605/6/7 | **For emerging to 5 and then move on to 10**Counts to 10, forwards and backwards (with understanding)Recognises some numerals with personal significance, e.g. door numberRecognises numerals 0-10Counts sets up to 10 using 1:1 correspondences *(moving objects, counting static objects)*Match numerals to 10 to setsUnderstands conservation, number to 10, *e.g. small /large Lego – looks more but is same*Understands number system using before, after, in between for numbers to 5Counts objects to 10 and is beginning to count beyond 10 Records using marks that they can interpret and explainUnderstands number system using before, after, in between for numbers to 10Estimates how many objects there are and checks by counting | Uses language of more/fewer to compare the sets of two objectsFinds the total of two groups by counting all of them (combining sets) – in context. Says as 🞏 and 🞏 makes 🞏 - *adult might write number sentence but not discuss*Can take a smaller set from a larger set for contextual number stories - 🞏 take away 🞏 leaves 🞏 - *adult might write number sentence but not discuss*Says the number that is one more than a given numberFinds one more and one less from a group of up to 10 objectsIn practical activities and discussions beginning to use vocab for add/subtractUnderstands vocabulary: groups, sets, the sameLinks sequencing numbers and before and after to concept of one more and one lessCreate repeating patterns using shape, colour etc (at least 2 or 3 parts)Shows interest in pattern in the environment |  |  |
| YR ELG8/9/10 | Count reliably with numbers from one to 20Place them in orderSay which number is one more or one less than a given number | Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. | They solve problems, including doubling, halving and sharing. |  |
| Y1 Emerging11/12 | Counts to 20, forwards and backwards, beginning with 0 or 1, or from any given number.Count, read and write numbers to 20 in numerals.Identify 1 more and 1 less to 20.Identify and represent numbers to 10 using objects and pictorial representations including the number line.Use the language of: equal to, more than, less than (fewer), most, least | Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs.Add and subtract one-digit and two-digit numbers to 20, including 0. |  | Understand half as sharing between two. |
| Y1 Developing13/14 | Counts to 50, forwards and backwards, beginning with 0 or 1, or from any given number.Count, read and write numbers to 50 in numerals.Identify 1 more and 1 less to 50.Identify and represent numbers to 20 using objects and pictorial representations including the number line.Read and write numbers from 1 to 20 in numerals and words.Understands and identifies odd and even numbers. | Knows number bonds to 10.Represent and use number bonds and related subtraction facts within 20.Solve one-step problems that involve + and -, using concrete objects and pictorial representations, and missing number problems such as 7 = ? – 9. | Count in 2s to 20.Count in 5s to 50.Understands the link between halves and doubles. |  |
| Y1 Secure15/16 | Count to and across 100 forwards and backwards, beginning with 0 or 1, or from any given numberCount, read and write numbers to 100 in numerals.Identify 1 more and 1 less to 100.Identify and represent numbers to 50 using objects and pictorial representations including the number line.Understands how a 100 square works.Understands patterns when counting to and from 100. | Begin to know number bonds to 20.Identify and represent numbers on a number line.Knows addition and subtraction facts to 10, and therefore to 20. | Count in 10s to 100.Understands the pattern for counting in 2s, 5s and 10s.Solve one-step multiplication and division problems using concrete objects, pictorial representations and arrays with support of the teacher and concrete resources.Link counting in multiples to adding the same size set iver and over.Link counting in multiples to pictorial arrays.Solves multiplication and division problems by drawing a representation.Understands multiplication as repeated addition. | 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.Recognises and understands notation for ½ and ¼.  |
| Y2 Emerging17/18 | Recognise the place value of each digit in a two-digit number (10s, 1s). Count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward.Identify, represent and estimate numbers using different representations, including the number line. | Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.Has a secure understanding of addition and subtraction number families.Can show that addition can be done in any order (commutative) whilst subtratcion cannot.Use the inverse relationship between addition and subtraction and to check calculations and solve missing number problems.Knows number bonds to 10 and uses to solve problems. | Understand how multiplication and division are linked to doubling and halving. |  |
| Y2 Developing19/20 | Compare and order numbers from 0 up to 100; use <, > and = signs.Read and write numbers to at least 100 in numerals and in words.Use place value and number facts to solve problems. | Solve addition and subtraction problems in a range of contexts.Add and subtract two-digit number and 1s, two-digit number and 10s, 2 two-digit numbers, 3 one-digit numbers, using concrete objects and pictorial representations.Knows number facts to 20, including number bonds and fact families. | Recall and use multiplication and division facts for the 2, 5 and 10 x tables.Solve multiplication in a range of contexts: repeated addition, pictorial method.Begin to solve problems mentally.Can tell the difference between an add and multiply context story.Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. | Recognise, find, name and write 1/4 2/4and 3/4 of a shape.Understands and uses notations eg ½ of 6 = 3. |
| Y2 Secure21/22 | Can round numbers up to the nearest 10 to 100. | Apply increasing knowledge of mental and written methods.Uses efficient methods to solve addition and subtraction problems.Knows number bonds to 100. | Understands division is inverse of multiplication.Show that multiplication can be done in any order (commutative) and division cannot.Solve problems involving multiplication and division in a range of contexts. | Know that 2/4 and 1/2are the same.Recognise, find, name and write 1/4 1/3 1/2 2/4 and 3/4 of a number or shape. |
| Y2 Greater Depth23/24 | Read scales where not all numbers are given and estimate points in between. | Use reasoning about numbers and relationships to solve more complex problems.Solve unfamiliar word problems that involve more than one step.Apply mental strategies fluently and quickly. | Recall and use multiplication and division facts for 2 5 and 10 x tables and make deductions outside of known facts eg 2x2 is same as 1x4.Use 2, 5 and 10 multiplication facts to solve word problems mentally. | Use fact knowledge to solve problems about fractions. |