The Discovery School Calculation Policy - Year 1 Subtraction



Additional Notes

Bar models <u>must</u> be used as a tool for problem solving as this ensures the children understand the structure of the problem.

National Curriculum Objectives

read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs represent and use number bonds and related subtraction facts within 20 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.

Objective	Concrete	Pictorial	Abstract
Subtract a 1 digit number within 10 (1) Looking at how many are left.	Use interesting physical objects (leaves/sticks) to count out an amount and show how objects can physically be taken away. Progress on to modelling this alongside the calculation with cubes. $6-2=4$ $6-2=4$ $My whole is 6 and I take 2 away.$	Provide children with images that they can 'cross out' to show the subtraction. 4 - 2 = 2 Children to begin drawing their own images to cross out to solve the calculation.	7 - 3 = 4
Subtract a 1 digit number within 10 (2)	Progress onto using cubes to show the movement of the parts in relation to the whole (This will help with the link to addition) I start with 6 I subtract 2 The remaining 4 make	Children begin to understand that when we subtract we start with the whole and can represent this in different ways. What has happened to the ice cream and strawberries?	When children have an understanding of how the numbers are related, move on to writing the related calculations. This could link to addition but doesn't have to.
Beginning to see subtraction as one part of the whole.	This is my whole up my other part. Encourage children to break off this part.	How many ice creams have sprinkles? How can we represent this?	
Subtracting a 1 digit number within 20 (counting back)	Begin to show subtraction as counting back. Make a bar showing the whole and then take each cube away whilst counting back 13-4= 13-4= 9 This is the subtracted part	Link counting back to subtraction on a number line. Dot the starting number and count back circling the final number you reach. Link this to the part - part whole model. The part I jump back is one part.	Put 13 in your head. I count back 4. What number do I get to? 13-4 = 9 Could be done mentally or supported by a number line.
Subtracting a 1 digit number within 20 (finding the differ- ence)	Teddy Long Jump Have a large number track on the playground and a real teddy or a smaller scale track on the table and a compare me bear. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 Teddy starts at 3. He lands on 7. How far has he jumped? Use cubes to make 2 towers and count the difference. Bob has 8 sweets. Dan has 4. How many more does Bob have?	Dave has 5 apples. Bev has 3 apples. How many more apples does Dave have? 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 Using a number track and moving to a number line children to circle the two numbers and then count the difference by jumping.	Teddy starts at 4. He lands at 10. How far has he jumped? What is the difference between 4 and 10? 10 - 4 = ? 4 + ? = 10