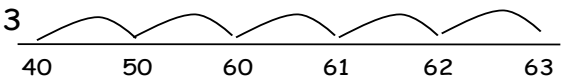
Adding with objects and on a number line lesson plan

DAY	We Are Learning To (WALT):	MODEL / INTRODUCTION	INDEPENDENT WORK	PLENARY
	Mental: Main: Add with objects / on a number line	Mental: Main: TA to take children who are unsure how to use concrete objects e.g. cubes, counters to add TA to model how to add using such concrete objects e.g. to do 4 + 2 get 4 cubes, get two more and count how many there are Ask each child to do an example. Children who are confident can get started on their independent work and children who are unsure can go through more examples with TA Teacher (with remainder of class) Model how to add on a number line by starting on the first number, then doing the number of jumps for the second number e.g. to calculate 4 + 2, start on number four and do two jumps. Do another example making deliberate mistakes of missing out numbers when jumping or landing in between numbers. Ask children to explain why these are mistakes. Emphasise: • need to land on a number (not between numbers) • not skip a number • make sure not to count the first number, only count after the first jump (You may wish to have middle ability children start their work at this point) Revise how when you add multiples of ten, only the tens number changes e.g. in 45 + 20, only the 4 changes, not the 5. Model how we can use a blank number line to calculate with 2-digit numbers: 1. Write the first number in the addition sentence at the start of the number line 2. See how many tens there are in the number to be added and carry out this many jumps of 10. 3. Do jumps of one for however many units there are 4. e.g. for 40 + 23, do two jumps of ten (one from 40 to 50 and another from 50 to 60, then three jumps of one, from 60 to 61, 61 to 62 and 62 to 63) 40 + 23 = 63  Encourage children working on addition of 2-digit numbers to use larger jumps e.g. to calculate 40 + 23 they may do one jump of 20 and one jump of 20 and one jump of 3, as using larger jumps is quicker if children can do it accurately	Lower ability – use concrete objects to add with numbers below 10 Middle ability – use a number line with all numbers on it, to do jumps of 1 Higher ability – use a blank number line to add multiples of 10 Gifted and talented – use a blank number line to add 2-digit numbers Extension – children to make up their own addition sentences to calculate on pupil	In ability partners give children 2 questions per pair, one for each partner (lower ability children to use cubes and middle ability children to use laminated number lines). Children need to talk to their partner, explaining why they are using the method that they are using e.g. using four jumps of ten to add 40 because there are 4 tens in forty.